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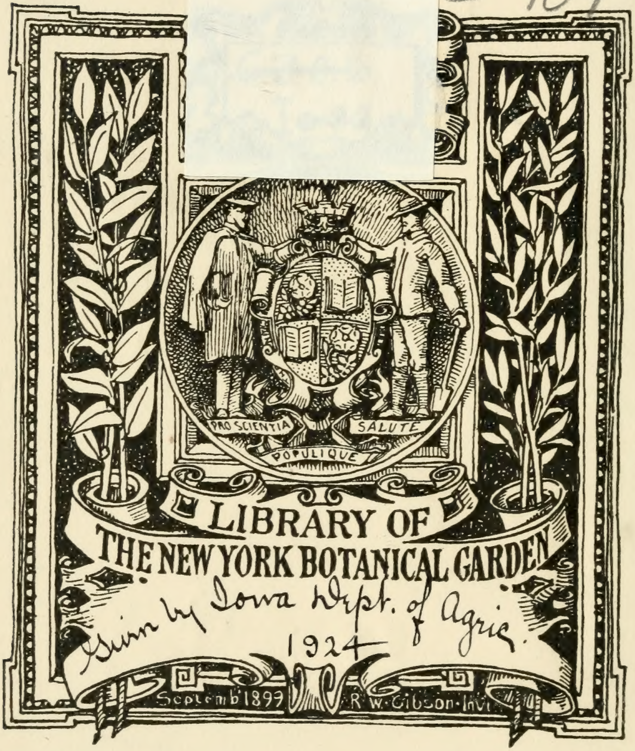
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IOWA YEAR BOOK OF AGRICULTURE

ISSUED BY THE

IOWA DEPARTMENT OF AGRICULTURE

1922

Published by
THE STATE OF IOWA
Des Moines

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1922

LETTER OF TRANSMITTAL

OFFICE OF IOWA STATE DEPARTMENT OF AGRICULTURE

Des Moines, Iowa, July 1, 1923.

To His Excellency, N. E. Kendall, Governor of Iowa:

Sir: I have the honor to transmit herewith the twenty-third annual Iowa Year Book of Agriculture for the year 1922.

ARTHUR R. COREY,
Secretary State Board of Agriculture.

INTRODUCTORY

In this book is an important cross-section of Iowa history for the year 1922.

It deals with the agricultural thought, progress and achievements of the year. Those who are interested in the further development of this great commonwealth and in the activities of her rural people will find in these pages a story well worth reading.

In Part I will be found the proceedings of the Iowa State Board of Agriculture, and of its executive and special committee meetings. In these meetings are made the plans for the great annual State Fair and Exposition. They furnish an interesting insight into how one of the state's most gigantic enterprises is prepared and managed.

The State Agricultural Convention, in which leaders in Iowa's agricultural progress discuss problems of the day, is recorded in Section II. It contains not only the addresses of well-known men in various fields of agriculture, but also the report of the secretary of the Iowa State Fair and the comment of the farm press on the 1922 exposition.

Part III is devoted to the thirteenth annual meeting of the Iowa Fair Managers' Association, the addresses by leading fair managers of the state, and the discussions which featured the gathering. All addresses are given in full, together with reports of committees and officers.

The winners in the 1922 Iowa State Fair are recorded in Part IV. This section gives not only the awards in practically all departments of the fair, but also numerous photographs of the leading live stock champions. The names and addresses of the owners of all prize winners are also given, together with the amounts won.

Accomplishments of the Iowa Farm Bureau Federation during the year 1922 and the proceedings of the annual Farm Bureau convention are reported in Part V. This section contains the speeches of leading officers and members, the reports of the president and secretary and the recommendations of important committees.

Part VI is the annual report of the Iowa Dairy and Food Commissioner. The work of the dairy inspectors, the progress of Iowa in the dairy industry, what is being done to develop a standard for products, and other activities of the dairy department are given at length in this part.

Those who are especially interested in the production of live stock for meat purposes will find Part VII to be highly instructive. It embraces excerpts from the proceedings of the Corn Belt Meat Producers' Association annual meeting. Almost all phases of beef production are discussed. Shipping questions, co-operative effort, animal diseases—these and scores of other subjects are gone into at length.

A review of the weather and crop conditions throughout the state during the year 1922 is given in Part VIII. This is the official report of the Iowa Weather and Crop Service Bureau and is illustrated by charts and tables which are very interesting.

The actual facts and figures regarding the farm production and farm conditions in Iowa during the year are given in Part IX. This is likewise compiled by the Iowa Weather and Crop Service Bureau and gives many of the figures on the basis of county production, furnishing comparisons as to preceding years and as to prices received.

The final section, Part X, is devoted to statistics showing the production of principal farm crops throughout the world for the year.

STATE BOARD OF AGRICULTURE
1923

EX-OFFICIO MEMBERS

N. E. Kendall, *Governor of State*	Des Moines
R. A. Pearson, *President Iowa State College*	Ames
R. G. Clark, *State Dairy Commissioner*	Des Moines
Peter Malcolm, *State Veterinarian*	Des Moines

OFFICERS

C. E. Cameron, *President*	Alta
J. P. Mullen, *Vice President*	Fonda
A. R. Corey, *Secretary*	Des Moines
F. E. Sheldon, *Treasurer*	Mt. Ayr

DISTRICT OFFICERS

First District—H. O. Weaver	Wapello
Second District—E. T. Davis	Iowa City
Third District—Earl Ferris	Hampton
Fourth District—E. J. Curtin	Decorah
Fifth District—Cyrus A. Tow	Norway
Sixth District—E. Ed Beman	Oskaloosa
Seventh District—C. F. Curtiss	Ames
Eighth District—J. C. Beckner	Clarinda
Ninth District—C. E. Hoffman	Atlantic
Tenth District—Sears McHenry	Denison
Eleventh District—H. L. Pike	Whiting

The President, Vice President, Secretary and Treasurer are elected for one year.

Terms of the Directors for odd-numbered districts expire second Wednesday in December, 1923. Terms of Directors for even-numbered districts expire second Wednesday in December, 1924.

STANDING COMMITTEES

Executive

C. E. Cameron
J. P. Mullen
A. R. Corey

Auditing

H. L. Pike
E. T. Davis
Sears McHenry

Resolutions

E. J. Curtin
H. O. Weaver
C. E. Beman

Powers and Duties of Board

C. E. Cameron
J. P. Mullen
A. R. Corey
Sears McHenry
C. F. Curtiss

Adulteration of Foods, Seeds and Other Products

R. A. Pearson
C. A. Tow
R. G. Clark

Noxious Weeds, Fungus Diseases in Grains, Grasses, Etc.

Earl Ferris
E. T. Davis

Dairying and Dairy Products

R. G. Clark
C. F. Curtiss
Sears McHenry

Animal Husbandry

C. F. Curtiss
E. T. Davis
Peter Malcolm

Legislative

C. E. Cameron
J. P. Mullen
A. R. Corey
H. O. Weaver
E. J. Curtin

Revision of Premium List

C. E. Cameron
J. P. Mullen
A. R. Corey
C. A. Tow
C. F. Curtiss
H. L. Pike

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PART IV

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PART IX

Farm statistics for the year ending December 31, 1922. Compiled by the Iowa Weather and Crop Service Bureau.

PART X

Statistical tables of Iowa's principal farm crops. Also statistical tables of farm crops and live stock by states, the United States and the world.

IOWA'S SOURCE OF WEALTH

DECEMBER 31, 1922

Compiled for the Iowa Year Book of Agriculture from Estimates Furnished by the Iowa Weather and Crop Service, showing Acreage, Average Yield and Total Yield of Farm Products.

Crop	Acres	Average yield	Total yield	Ave. price	Gross value per acre	Total value
Corn	10,123,000	45.00 bus.	455,535,000	$ 0.54	$24.30	$245,989,000
Oats	6,023,000	37.00 bus.	222,851,000	0.34	12.58	75,769,000
Spring wheat	68,000	15.00 bus.	1,020,000	0.95	14.25	969,000
Winter wheat	689,000	23.00 bus.	15,847,000	0.97	22.31	15,372,000
Barley	150,000	28.40 bus.	4,260,000	0.52	14.77	2,215,000
Rye	60,000	19.00 bus.	1,140,000	0.71	13.49	809,000
Flax seed	8,000	10.00 bus.	80,000	2.07	20.70	166,000
Timothy seed	230,000	4.53 bus.	1,042,000	2.49	11.28	2,595,000
Clover seed	132,000	1.70 bus.	224,000	10.40	17.65	2,330,000
Potatoes	[a]94,000	90.00 bus.	8,460,000	0.62	55.80	5,245,000
Hay (tame)	3,393,000	1.40 tons	4,750,000	10.40	14.56	49,400,000
Hay (wild)	432,000	1.14 tons	492,000	8.50	9.68	4,182,000
Alfalfa	200,000	2.67 tons	534,000	14.80	39.52	[b]7,903,000
Pasture and grazing	10,130,000			5.58		56,525,000
Ensilage	304,000	8.00 tons	2,432,000	3.40	27.20	[c]8,269,000
Sweet corn (com'l crop)	30,000	3.00 tons	90,000	7.00	21.00	630,000
Pop corn	5,500	2,200.00 lbs.	12,100,000	0.03	66.00	363,000
Buckwheat (estimated)	5,000	14.00 bus.	70,000	1.19	16.66	83,000
Fruit crop (estimated)						10,000,000
Garden truck (estimated)						5,000,000
Miscellaneous (estimated)						2,500,000
Total value, not including live stock products, for the year, 1922						$480,142,000
Dairy products (estimated)						120,000,000
Poultry and eggs (estimated)						65,000,000
Wool, 3,963,000 lbs. at 30 cents						1,188,900
Total value of farm products						$666,330,900

NUMBER, AVERAGE VALUE AND TOTAL VALUE OF LIVE STOCK DECEMBER 31, 1922

(Figures taken from estimates made by United States Department of Agriculture.)

	Number	Average value	Total value
Horses	1,305,000	$79.00	$103,095,000
Mules	101,000	80.00	8,080,000
Milk cows	1,160,000	58.00	67,280,000
Other cattle	3,479,000	35.20	122,461,000
Swine	9,615,000	12.80	123,072,000
Sheep	829,000	8.40	6,964.000
Total value of Live Stock			$430,952,000
Total value of farm products and live stock			$1,097,282,900

[a] Subject to revision when assessors' figures become available.
[b] Alfalfa included in tame hay and therefore excluded from grand total.
[c] Ensilage, acreage, production and value is included in corn and therefore excluded from grand total.

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PART I

Synopsis of Proceedings of the Iowa State Board of Agriculture and Executive and Special Committee Meetings for the Year 1922

SPECIAL COMMITTEE MEETING

Sioux City, January 3-4, 1922.

In accordance with previous arrangements, the special committee consisting of Cameron, Mullen, Corey and Curtin met at the West Hotel, Sioux City, with representatives of the Northwest Iowa Fair Circuit and members of the Iowa, Minnesota and South Dakota Racing Circuit.

Inasmuch as no representative of the Minnesota State Fair or the Nebraska State Fair was present, the forming of the state fair circuit was postponed with the understanding that the meeting would be held during the February meeting of the International Association of Fairs and Expositions in Chicago.

EXECUTIVE COMMITTEE MEETING

January 26-27, 1922.

Members present Cameron, Mullen and Corey.

The president and secretary signed vouchers for the state aid of $2,400 for the support of the Department of Agriculture and $1,000 for insurance on buildings, repairs, etc.

The committee fixed the date for the next meeting of the board for March 7 and 8.

The secretary was authorized to employ a stenographer to assist in the Publicity Department and in preparing material for the Year Book, as soon as her services were required.

The secretary was authorized to place an order for 3000 hangers to be used in advertising the state fair.

The committee went over the pay rolls of the superintendents of the various departments for the purpose of working out a budget for each department, to be recommended at the board meeting on March 7.

The committee also decided to recommend that the auto parking department be consolidated with the police department.

The committee approved payment of bills on file.

SPECIAL COMMITTEE MEETING

Auditorium Hotel, Chicago, Illinois, February 20-24, 1922.

The special committee, consisting of the executive committee and Director Curtin, met at the Auditorium Hotel, Chicago, Illinois, February 20-24, inclusive, for the purpose of attending the following meetings:

JAN 22 1924

Monday, February 20, International Motor Contest Association.

Tuesday, February 21, Biennial Congress of the American Trotting Association, the Middle-West Fair Circuit meeting, and the Iowa-Missouri-Nebraska Racing Circuit meeting.

February 22-23-24, Meeting of the International Association of Fairs and Expositions.

Representatives of the following fairs met and formed a circuit to be known as the "Middle-West Fair Circuit:" Missouri State Fair, Iowa State Fair, Nebraska State Fair, Kansas Free Fair, Kansas State Fair, Oklahoma State Fair, Oklahoma Free State Fair, State Fair of Texas, Texas Cotton Palace and the State Fair of Louisiana. A membership fee of $100 for each fair was agreed upon. A. R. Corey was elected president of the circuit and Phil Eastman, secretary. The secretary was instructed to publish 40,000 or 50,000 circulars advertising this circuit, and to include in this circular the premium offerings of each fair; also shipping instructions for exhibitors and a brief of the live stock sanitary rules in each state. Mr. B. C. Biggerstaff of Kansas City, Missouri was employed as tariff manager for the circuit.

Representatives of the following fairs held a meeting for the purpose of organizing the Iowa-Missouri-Nebraska Racing Circuit: Mississippi Valley Fair and Exposition, Missouri State Fair, Iowa State Fair, Nebraska State Fair, Ak-Sar-Ben Exposition, Omaha, Nebraska, Interstate Fair, Sioux City, Iowa. Mr. A. C. Dingle of the Missouri State Fair was elected president of the circuit and Mr. M. E. Bacon of Davenport, secretary. May 23rd was fixed as the date for the closing of all early closing events. The closing date for the late closing events to be at the option of the member. It was also agreed that each member would carry a synopsis of all the programs on the back page of the entry blank. The secretary was instructed to carry a page ad in the two horse papers covering the early closing events, April 4, May 9 and 16; also a one page ad announcing the late closing events, on July 25.

The committee authorized the secretary to submit a bid of $300 for the Western Breeders' Futurity for three-year-old trotters and pacers.

The executive committee closed the following attraction contracts:

F. M. Barnes, Inc., 12 hippodrome acts for 8 days.

Thearle-Duffield Fireworks Co., Night show in front of grand stand for six performances for the spectacular fireworks performance known as "Mystic China."

Allie T. Wooster, to furnish twenty head of running horses to put on the following attractions:

One Roman Standing Race.

One-half mile running dash between lone running horse and automobile.

One three-mile lady relay race with three lady riders to change horses at end of each mile each day of the fair, commencing Saturday, August 26, for $1,800.

The committee also closed a sharing contract for the C. A. Wortham Shows, to consist of not less than twenty shows and six riding devices.

The committee also secured propositions from J. Alex Sloan, The International Auto Racing Association, and R. A. Hankinson for guaranteeing the appearance of a certain number of racing cars and professional drivers, but made no contracts.

MEETING OF THE STATE BOARD OF AGRICULTURE

March 7-8, 1922.

The board convened at 9:30 a. m. with President Cameron presiding. The following members responded to roll call: C. E. Cameron, J. P. Mullen, A. R. Corey, H. O. Weaver, E. T. Davis, Earl Ferris, E. J. Curtin, C. A. Tow, T. C. Legoe, F. E. Sheldon and Carl E. Hoffman. Absent: W. W. Morrow, C. F. Curtiss, Sears McHenry and H. L. Pike.

The secretary read the minutes of the board and committee meetings commencing with the minutes of the State Agricultural Convention held on December 14 and concluding with the special committee meeting held at the Auditorium Hotel, Chicago, Illinois, February 20 to 24. On motion the minutes were approved as read.

RELEASE OF EXHIBITS

Mr. Mullen moved that all exhibits be released at four o'clock, Friday afternoon, September 1, the last day of the fair. Motion seconded by Mr. Sheldon, and carried.

BUDGET FOR PAY ROLLS.

The board took up the matter of the budget for pay rolls and expense for the 1922 fair. The pay roll for each department was discussed at length by the board for the purpose of making up the 1922 budget.

Board recessed until 1:30 p. m.

Afternoon Session.

Board convened at 1:30 p. m., with members present as at forenoon session; also Sears McHenry.

REVISION OF PREMIUM LIST

Mr. Cameron declared the next order of business was the revision of the premium list, and called upon the superintendent of the swine department for his recommendation.

Mr. Weaver moved that the board reconsider the vote by which a reduction of 20 per cent was to be made on premiums in the swine department on December 15. Motion seconded by Mr. Ferris, and carried.

Mr. Tow moved that the classification recommended be adopted for the swine department for this year's fair.

In addition to the standard classification of $850, Mr. Tow recommended that the record association be invited to add special money, to the open classification and that the board meet their special money dollar for dollar, up to $250. The motion was seconded by Mr. Mullen, and carried.

Mr. Weaver moved that the revision of the premium list for the sheep department, as agreed upon by the board, be adopted for the 1922 fair. Motion seconded by Mr. Mullen and carried.

Mr. McHenry moved that the classification for milk goats remain the same as last year, but that the classification for Angora goats be dropped. Motion seconded by Mr. Ferris, and carried.

The secretary presented a statement to the board, showing a revision of the classification for the various departments in accordance with the recommendation of the board at their December meeting.

The secretary also presented the budget for advertising the 1922 fair.

Mr. Ferris moved that the advertising budget as submitted by the secretary be approved. Motion seconded by Mr. Mullen, and carried.

On account of Mr. Pike, superintendent of the cattle department, being absent, the secretary submitted the revision for the cattle department which was thoroughly discussed by the board.

Mr. Weaver moved that the revision of the cattle department as submitted by the secretary, be approved by the board. Motion seconded by Mr. Tow, and carried.

The board adjourned to meet at 9 o'clock Wednesday, March 8.

Wednesday, March 8, 1922.

Meeting was called to order by President Cameron.

The following members responded to roll call: Cameron, Mullen, Corey, Davis, Ferris, Curtin, Tow, Legoe, Curtiss, Hoffman and McHenry. Absent: Morrow, Weaver, Sheldon and Pike.

Mr. Curtin submitted the revision of the offerings in the speed department.

Mr. Curtin moved that the speed program as submitted be approved. Motion seconded by Mr. Davis and carried.

C. F. Curtiss, superintendent of the horse department, presented the revision of the horse department, which he explained fully to the board.

Mr. Mullen moved that the revision of the horse department, as recommended by Mr. Curtiss, be approved by the board. Motion seconded by Curtin, and carried.

The secretary presented the standard classification for beef cattle, which was recommended by the record association, and adopted by the International Association of Fairs at their meeting on February 22.

The International Association of Fairs also recommended that the junior bulls and heifer calves be dropped from the dairy cattle classes.

Mr. Curtiss moved that the classification for beef and dairy cattle, as recommended by the International Association of Fairs, be adopted for the Iowa State Fair. Motion seconded by Mr. Tow, and carried.

The secretary presented the following tabulation covering the budget for premiums to be offered by the Iowa State Fair for 1922. This summary covers the revision of the premium list as directed by the board at the December meeting, and also at this meeting.

	Offered 1921	Budget for 1922	Increase	Decrease
Horse department	$ 26,890.00	$20,705.00		$ 6,185.00
Cattle department	30,248.00	25,370.00		4,878.00
Swine department	6,750.00	6,300.00		450.00
Sheep department	4,576.00	3,744.00		832.00
Goat department	415.00	325.00		90.00
Poultry department	2,419.00	2,203.00		216.00
Rabbit department	243.00	200.00		43.00
Culinary	846.00	846.00		
Honey and Bees	650.00	600.00		50.00
Agriculture	13,593.00	11,619.00		1,974.00
Dairy	722.00	722.00		
Horticulture	3,109.00	2,675.00		434.00
Floriculture	1,979.00	200.00		1,779.00
Textile and China	1,637.00	1,637.00		
Art department	662.00	662.00		
Boys and Girls' Club	4,883.00	4,272.75		610.25
Educational	965.00	817.00		148.00
Judging contest	850.00	600.00		250.00
Judging Team	225.00	225.00		
Spelling contest	200.00	160.00		40.00
Baby health	500.00	500.00		
Speed	16,950.00	11,800.00		5,150.00
Horseshoe contest	350.00	1,350.00	$1,000.00	
	$119,662.00	$97,532.75	$1,000.00	$23,129.25

Mr. McHenry moved that the complete budget for premiums, as presented by the secretary, be approved. Motion seconded by Mr. Davis and carried.

The secretary presented the following revised budget as agreed upon by the board covering pay rolls and expense of the fair other than premiums:

	1921 Fair Expense	Budget 1922 Fair
Committee meetings	$ 4,088.00	$ 3,000.00
Postage	1,722.00	1,600.00
Printing	10,500.00	9,000.00
Advertising	23,317.00	23,000.00
Attractions	38,348.00	30,000.00
Auto races	6,600.00	6,600.00
Light and power	2,995.00	3,000.00
Water	695.00	700.00
Forage	10,170.00	10,000.00
Salaries, secretary's office	10,793.00	10,525.00
Board meetings	1,299.00	1,300.00
Decorating buildings	1,686.00	1,400.00
Treasurer's department	3,967.00	2,700.00
Admissions department, ticket takers	4,969.00	3,800.00
Admissions department, ushers	1,348.00	1,000.00
Admissions department, gate police	1,349.00	800.00
Police department	4,148.00	3,500.00
Concessions department	3,124.00	2,500.00
Horse department	1,994.00	1,500.00
Cattle department	1,575.00	1,250.00
Swine department	1,019.00	750.00
Sheep department	654.00	500.00
Poultry department	490.00	400.00
Machinery department	1,560.00	850.00

Agricultural department	1,218.00	750.00
Horticultural and Floricultural	589.00	450.00
Speed department	1,316.00	970.00
Exposition department	665.00	500.00
Educational department	334.00	250.00
Ticket auditing department	479.00	350.00
Boys and girls' club department	1,292.00	900.00
Boys and girls' judging contest	102.00	75.00
Baby health department	1,332.00	950.00
Program Women and Children's building	1,038.00	800.00
Day nursery	222.00	200.00
Campers' headquarters	387.00	175.00
Auto parking	280.00	....
Property men	447.00	400.00
Art department	285.00	225.00
Awards department	92.00	100.00
Janitors	786.00	700.00
Dairy department	1,723.00	1,500.00
Plants and flowers	889.00	750.00
Premium ribbons	2,525.00	2,000.00
Tents, bedding, etc	1,135.00	1,000.00
Cups and medals	788.00	750.00
Signs	746.00	500.00
Miscellaneous items	16,616.00	12,650.00
	$173,696.00	$146,620.00

Mr. Mullen moved that the budget be adopted and approved by the board. Motion seconded by Mr. McHenry and carried.

Mr. McHenry moved that all unfinished business be delegated to the executive committee with power to act. Motion seconded by Mr. Curtiss and carried.

The board adjourned to meet at the call of the president.

EXECUTIVE COMMITTEE MEETING.

March 8–9, 1922.

Members present Cameron, Mullen and Corey.

President Cameron appointed Mr. E. T. Davis a member of the auditing committee, to take the place of Mr. Reeves, who was succeeded on the board by Earl Ferris.

The following bids were received for printing the 1922 State Fair Premium List, the bids on a basis of 256 pages to be printed on No. 1 S. & S. C. book paper:

Miles-Bratton	$2,427.50
Homestead Co	2,060.00
Campbell Printing Co	2,268.00
Doty Publishing Co	2,265.00
John M. Jamison	2,085.00
Successful Farming	2,072.95

The committee authorized the secretary to let the contract to the Homestead Printing Co., who were the low bidders for $2,060.00 for 12,000 copies.

The secretary brought to the attention of the committee the proposition of Walter W. Raub to put on balloon ascensions each day of the fair. The committee directed the secretary to make a contract with Mr. Raub for the seven days at $400.

Mr. Mullen, superintendent of the machinery department, recommended that the charge for space in machinery hall be left the same as in 1921, but instead of quoting the rate at 15c per square foot, the applications and all advertising should quote the space as follows:

Full space, 17x35 feet, $90.
One-half space, 17x17½ feet, $45.

The recommendation of Mr. Mullen was approved by the committee.

The secretary submitted propositions for bands to play the various engagements at the Iowa State Fair:

A committee, including Dr. Atkins, director of the Argonne Post Band, appeared before the committee and presented the merits of their band and also urged the committee to engage the Argonne Post Band for this year's fair.

The committee directed the secretary to enter into contract for Murray's Family Orchestra as per their proposition of $200 for the week.

The superintendent of grounds, Mr. Deets, was authorized to employ a mechanic to overhaul the two Federal trucks, the Ford and International trucks, and the two F. D. trucks recently acquired from the government.

The committee entered into an agreement with George Whitney for the sale of sugar sand from the pit northeast of the Coaster at 37½c per load.

EXECUTIVE COMMITTEE MEETING

March 23-24-25, 1922.

The committee met with Cameron, Mullen and Corey present.

The committee attended the surplus property sale at Camp Dodge on March 24 and purchased sixty transformers for the sum of $2,460.

The secretary was authorized to withdraw $5,000 from the savings account and deposit same to the credit of W. W. Morrow, treasurer. Also to issue a warrant in favor of the Surplus Property Officer for $2,460 in payment of the transformers.

The committee considered the propositions on file for guaranteeing the appearance of certain professional automobile racing drivers and racing cars. The committee decided to accept the following propositions and directed the secretary to make contracts for same.

J. Alex Sloan, Chicago, Illinois, to furnish not less than six specially constructed racing cars and six professional drivers to participate in the auto racing on Friday, August 25 and Friday, September 1. Contract also to provide that Sig. Haugdahl shall exhibit his Wisconsin Special racing car with which he broke the beach records.

International Auto Racing Association, Robert Hickey, manager, to guarantee the appearance of eight specially constructed racing cars and eight professional drivers to participate in the automobile racing on the above dates.

Mr. A. F. Thaviu, director of Thaviu's Band, presented a proposition to the committee to furnish a thirty-piece concert band for a period of seven days, commencing Friday, August 25 and closing Thursday, August

31, for the sum of $3,200. And also to present each evening of the fair, in front of the grand stand, one act from the grand opera Aida. In producing this grand opera, Mr. Thaviu agrees to furnish not less than five grand opera principals, a chorus of forty voices, a ballet of nine, the necessary scenery and costumes, stage hands, carpenters, electricians, rigging to handle the scenery, lights, etc., for the sum of $3,000. Under this agreement Mr. Thaviu is to furnish everything complete for putting on this production with the exception of the stage and the platform for the band. The committee accepted Mr. Thaviu's proposition and directed the secretary to draw and sign the contracts.

The committee also accepted the proposition of the Argonne Post Band to furnish a concert band consisting of thirty-three pieces for eight days at $1,985.

Also the proposition of Frank G. Isaacson, manager of the Fort Dodge Military Band, for a band of twenty-five pieces for the eight days of the fair at $2,050.

Also the proposition of George W. Landers for the Page County Farmers' Band, consisting of thirty musicians, for seven days, commencing Friday noon, August 25, and closing Friday noon, September 1, for the sum of $1,000.

The superintendent of grounds, Mr. Deets, was authorized to purchase a steel hand dump box owned by the Morris Plan Bank and stored at the Iowa State Fair grounds, for a sum not to exceed $75 and to have the same placed on one of the Federal trucks for hauling cinders, sand, etc.

Prof. Fredrica Shattuck of the Iowa State College, in charge of the Country Theatre movement, appeared before the committee and submitted a proposition for conducting the Country Theatre at the Iowa State Fair. She stated that at the 1921 fair, the expense of putting on this enterprise was taken care of out of funds derived from putting on amateur theatricals. She further stated that these funds were depleted and it would not be possible to finance the matter in this manner again this year, and asked for an appropriation of approximately $800 to defray the expense.

The committee informed Miss Shattuck that inasmuch as there was nothing in the budget to take care of this expense, they would authorize her to make an admission charge to the Country Theatre of ten cents and that the board would make up any deficiency up to $800. Miss Shattuck accepted the proposition and agreed to present the Country Theatre at the State Fair.

EXECUTIVE COMMITTEE MEETING

April 27-28-29, 1922.

Members present: Cameron, Mullen and Corey.

The executive committee and members, Curtiss and McHenry, attended the funeral of W. W. Morrow, treasurer of the department, at Afton, Iowa, on Thursday, April 27.

The executive committee met with the following representatives for the purpose of working out a classification and details for holding the

National and State Horseshoe Pitching Tournaments: Mr. B. G. Leighton, president of the National Horseshoe Pitchers' Association; Mr. James McKeon, president and T. H. Fogarty, treasurer of the State Association, and Joe Becker, secretary of the Polk County Horseshoe Pitchers' Association.

The committee decided to locate the courts in the open space north of the brick horse barn and south of the Fish and Game Exhibit. The classification as agreed upon called for an appropriation by the State Fair Management of $900 in the Men's National Tournament, $100 in the Women's National Tournament, and $250 in the State Tournament. The State Fair management is also to provide the six medals offered in the Men's and Women's National Tournaments at a cost not to exceed $200. The entry fee in the national tournament for men was fixed at $2.00 and for women at $1.00, and in the Men's State Tournament at $1.00. The classification and rules to be practically the same as used at the national tournament held at the Minnesota State Fair in 1921.

The following officers for the tournament were selected: Tournament manager, B. C. Leighton; referee, James McKeon; head scorer, Mrs. H. J. Pletscher; superintendent of courts, T. H. Fogarty.

It was agreed that the tournament was to be advertised and held under the auspices of the National Horseshoe Pitchers' Association of the United States; the National League of Horseshoe and Quoit Pitchers' Association; Iowa State Horseshoe Pitchers' Association and the Iowa State Fair.

It was agreed that Mr. B. G. Leighton was to be paid $100, hotel and traveling expenses, for his service in promoting and managing the tournament. It was also agreed that Mr. Leighton was to solicit the trophies to be offered by the state and national associations, and that the other trophies offered as prizes, in both the national and state, were to be solicited by a local committee selected by the State and Polk County Horseshoe Pitchers' Associations.

The State Tournament to start Monday morning, August 28; the National Tournament to start at two o'clock Tuesday, August 29 and the Women's National Tournament at nine a. m., Wednesday, August 30.

The executive committee assigned the three spaces in the east end of the exhibition room under the grand stand to the board of control of state institutions for their industrial exhibit; also the sleeping room in the cattle barn just back of the sale ring for sleeping quarters for the boys' band, and men in charge of the exhibits. It was also agreed that the fair would furnish the material for building the necessary booths in this exhibit room with the understanding that the board of control would furnish the necessary labor for construction of same.

The board of control agreed to have an exhibit from each of their sixteen state institutions and also a creditable exhibit of dairy cattle.

At the request of the superintendent of the educational department, the executive committee agreed to designate Friday as "Children and Public School Day", grant the public schools the use of the assembly tent on that day and also appropriate $50 to defray the expense of bringing in a high school band to take part in the program, to be provided and carried out in the assembly tent.

Prof. P. C. Taff and F. P. Reed presented a proposition to the committee for serving meals to the boys and girls having exhibits and taking part in demonstrations during the fair.

It was the opinion of the executive committee that the old floral hall might be made available as a mess hall for this purpose and that the necessary tables, refrigerator, and hotel ranges might be secured from Camp Dodge.

The executive committee suggested that they would consider a plan whereby they would furnish the building and this equipment providing the state club leader would give the matter general supervision and employ some one to operate the dining hall, with the understanding that the charge for meals would take care of the operating expense.

The secretary presented a list of equipment necessary to complete the instalment of the large transformers at the transformer station, total cost to be approximately $671.50. Also a requisition for 400 gallons of transformer oil to refill the transformers purchased from Camp Dodge. The executive committee authorized the purchase of same.

The committee also entertained a proposition from John Connelly, Des Moines, Iowa, for putting on a head-on collision on Saturday, August 26. In his proposition he proposes to give the State Fair the first $20,000 of receipts at the outside gates and afternoon grand stand, he to receive the next $10,000, and all over $30,000 to be divided fifty-fifty. Or, he would give the State Fair the first $18,000, he to receive the next $8,000 and all over $26,000 to be divided fifty-fifty. Action on this matter was deferred until it might be brought to the attention of the board.

The secretary presented a letter from Frank D. Paine, professor of electrical engineering, Iowa State College, for putting on an exhibit of amateur radio outfits.

The executive committee authorized an appropriation of $60, $30 to be offered for outfits exhibited by boys under fourteen years of age, and $30 for outfits exhibited by boys over fourteen and under twenty years of age.

The request of Mr. Griffin and Mr. Rood for the use of the race track for a race meeting on July 4 and 5 was brought to the attention of the committee. The committee agreed that they might have the use of the track on the above dates for the purpose of putting on a race meeting for the actual expense the fair might incur on account of making arrangements and in taking care of the track during the meeting.

The superintendent of grounds was directed to have such repairs made to the roof of the swine judging pavilion and the swine barn as is absolutely necessary to prevent further depreciation of the sheeting.

The committee approved the contract made by the secretary with E. L. Keyser and D. J. Tracy for publishing the official catalog. Contract provides the above parties shall publish ten thousand copies, furnish the fair one thousand copies free, and pay seventy-five per cent of the printing bill. They to receive receipts from advertising and sale of catalogs. The Fair to pay twenty-five per cent of the printing bill.

The committee approved payment of bills.

MEETING OF THE STATE BOARD OF AGRICULTURE.

May 11, 1922.

Meeting was called to order at 9:30 a. m. by President C. E. Cameron. The following members responded to roll call: C. E. Cameron, J. P. Mullen, A. R. Corey, H. O. Weaver, E. T. Davis, Earl Ferris, E. J. Curtin, Cyrus A. Tow, T. C. Legoe, C. F. Curtiss, F. E. Sheldon, Sears McHenry, Carl E. Hoffman, H. L. Pike, R. G. Clark and Dr. Peter Malcolm. Absent: Gov. N. E. Kendall and Pres. R. A. Pearson.

The president announced that the purpose of the meeting was to elect a treasurer to fill the vacancy caused by the death of W. W. Morrow.

President Cameron called upon Mr. Weaver, chairman of the resolutions committee, to present the resolution that the committee had prepared. The following resolution was presented by Mr. Weaver and unanimously adopted by a standing vote of the board.

IN MEMORIAM

Willison W. Morrow, in his seventy-fifth year, died at his home in Afton, Union County, Iowa, on the 25th day of April, 1922.

The history of Iowa would be incomplete without the story of his life. The merits of his true worth and manly qualities were discovered in his early boyhood days. His nearest neighbors first learned to love him because of these qualities, and soon his broadmindedness and unselfish motives found a place in the hearts of the citizenship of Union County, and finally he became one of the leaders of our great state.

The earliest recollections we have of Mr. Morrow was his association with men of true character and worth in the affairs of his time. His good judgment was consulted by his immediate friends, his agricultural associates, and his political adherents. The general welfare of Iowa, and especially of the Eighth District, was never measured until it had his voice of sanction.

He was elected from Union County as a member of the Twenty-third and Twenty-fourth General Assemblies. He was director of the State Agricultural Society from December, 1898 to July 4, 1900; a director of the State Board of Agriculture from July 4, 1900 to December 10, 1902; was president of the State Board of Agriculture from December 10, 1902 to December 12, 1906. He was elected treasurer of the state of Iowa in 1907 and served until 1913. On February 24, 1915, he was elected treasurer of the State Board of Agriculture where he served until the time of his death.

As officers and directors of the State Board of Agriculture we were impressed by his frank address; his straightforward manner of living; and his plain confidence in the good fellowship of those with whom he met. He loved a true heart, and discarded deceit and hypocrisy wherever found. His was a sturdy character, surrounded by the most lovable instincts of humanity, which can come from only a broad mind and sympathetic nature.

> "Stout muscles and a sinewy heart,
> A hardy frame and hardier spirit;
> King of his two hands, he does his part,
> In every useful toil and art."

He was one of the builders of this institution, and gave his heart and soul to the progress of agriculture in this state, believing, as he did, that it was the foremost industry and the basis upon which our future welfare must rest. As an officer of the State Board of Agriculture, he devoted his entire energy to the success and up-building of this great institution. Willison W. Morrow loved his life's work, content with the progress that he had shared in the making of citizenship. His industrious life, coupled with his love for the up-building of this department, will stand as a monument to his wisdom, and those accomplishments we, as officers and members of the State Board of Agriculture, will most graciously inherit.

Therefore Be It Resolved, That it is with deep regret and profound sorrow that this board is called upon to chronicle the death of Honorable Willison W. Morrow.

Resolved, That the State Board of Agriculture extend to his family and the people of the state of Iowa condolence in their bereavement.

Resolved, That the secretary of this department transmit to the family of the deceased a copy of these resolutions, with the action of this board thereon.

E. J. Curtin
T. C. Legoe
H. O. Weaver
Committee on Resolutions.

N. E. Kendall
C. E. Cameron
J. P. Mullen
A. R. Corey
E. T. Davis
Earl Ferris
Cyrus A. Tow
C. F. Curtiss
F. E. Sheldon
Carl E. Hoffman
Sears McHenry
H. L. Pike
R. G. Clark
P. Malcolm

President Cameron announced that the next order of business would be the election of a treasurer and requested that the secretary read the names of the candidates who had been suggested for this position.

Mr. McHenry moved that the board proceed to take an informal ballot. Motion was seconded by Mr. Davis, and carried. The informal ballot resulted as follows:

F. E. Sheldon	10 votes
N. W. McBeath	3 votes
E. H. Hoyt	2 votes

Mr. Sheldon presented the following communication to the board:
"To the Iowa State Board of Agriculture:

I hereby tender my resignation as a member of the Iowa State Board of Agriculture from the Eighth Congressional District.

F. E. Sheldon"

Mr. Mullen moved that the resignation of Mr. Sheldon, as director from the Eighth District, be accepted. Motion seconded by Mr. Ferris, and unanimously adopted.

Mr. McHenry moved that the board proceed to take a formal ballot for treasurer to fill the unexpired term caused by the death of W. W. Morrow. The ballot resulted in sixteen votes for F. E. Sheldon of Mt. Ayr. The president declared Mr. Sheldon duly elected.

Mr. Weaver moved that the salary of the treasurer be fixed at two hundred and fifty dollars per year and traveling expenses as provided by law and that he be required to give a personal bond of one hundred thousand dollars, same to be approved by the board. Motion seconded by Mr. Curtin, and carried.

Mr. B. W. Garrett, clerk of the supreme court, appeared before the board and administered the oath of office to Mr. Sheldon as treasurer of the Iowa Department of Agriculture.

Mr. Sheldon presented his personal bond for one hundred thousand dollars, signed by Simon Casady, W. S. Nollen and D. N. Grimes, officers of the Central State Bank, as sureties.

Mr. Curtin moved that the bond presented by Mr. Sheldon be accepted by the board and filed with the secretary. Motion seconded by Mr. Hoffman, and unanimously adopted.

The president announced that the election of Mr. F. E. Sheldon as treasurer of the department left a vacancy on the board of directors from the Eighth District.

Mr. J. S. Connelly appeared before the board and presented a proposition for putting on a head-on collision Saturday, August 26. In brief, Mr. Connelly proposed to furnish two locomotives with two box cars attached to each to be used in the collision, he to take care of all expense necessary to put on this collision. The State Fair to receive the first $20,000 taken in at the outside gates up to five o'clock and at the afternoon grand stand; next $10,000 to be paid to Mr. Connelly as compensation for putting on the collision. All amounts over $30,000 to be divided equally between the fair and Mr. Connelly.

After considerable discussion Mr. Ferris moved that the board accept the proposition made by Mr. Connelly for the head-on collision and that the executive committee be authorized to enter into a contract on a basis equally as favorable to the fair as the proposition outlined by Mr. Connelly. Upon roll call the vote resulted as follows: Ayes, Mullen, Corey, Weaver, Davis, Ferris, Tow, Curtiss, Sheldon, Hoffman, McHenry, Pike, Clark, Malcolm. Noes: Cameron, Curtin and Legoe. Ayes, 13. Noes, 3.

Upon motion duly made, seconded and carried, the board recessed until 1:00 p. m.

AFTERNOON SESSION

1:00 P. M.

The board reconvened with the same officers and members present as at the forenoon meeting.

Mr. Sheldon moved that Mr. J. C. Beckner of Page County be elected by the board as director of the Eighth District to fill out the unexpired term. Motion seconded by Mr. McHenry, and unanimously adopted.

The president declared Mr. Beckner duly elected.

Upon motion made, seconded and carried the board adjourned to meet at the call of the president.

EXECUTIVE COMMITTEE MEETING

May 11, 1922

Immediately following the board meeting, the executive committee met with the following members present: Cameron, Mullen and Corey.

A telegram from Mr. D. V. Moore, secretary of the International Association of Fairs, calling attention to the hearing before the Western Passenger Association in Chicago on Tuesday, May 16, on special passenger rates to state fairs, was read by the secretary. The committee authorized the secretary to attend this meeting as a representative of the Iowa State Fair.

EXECUTIVE COMMITTEE MEETING

May 25-26-27, 1922.

The committee met with the following members present: Cameron, Mullen and Corey; also Directors F. E. Sheldon and J. C. Beckner.

Mr. B. W. Garrett, clerk of the supreme court, administered the oath of office to Mr. J. C. Beckner as director of the State Board of Agriculture from the Eighth District.

The committee assigned Mr. Beckner as superintendent of the admissions department. The committee and Mr. Sheldon went over all the details of the admissions department with Mr. Beckner.

The committee employed Mr. T. H. Fogarty to construct twenty horseshoe courts for taking care of the state and national horseshoe pitching tournaments.

The committee, with Mr. Fogarty and the superintendent of grounds, laid out the courts and authorized the purchase of the necessary material for properly equipping same.

The committee conferred with Adjutant General Lasher and Gov. N. E. Kendall regarding the borrowing or purchasing of the two 350 k. w. transformers. Inasmuch as the state was unable to close the contract for the buildings and equipment at Camp Dodge, the secretary was authorized to cooperate with Governor Kendall with a view to borrowing these transformers from the War Department with the understanding that they were to either be returned after the State Fair or a satisfactory settlement made for same.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING

June 28-29-30

Members present: Cameron, Mullen and Corey.

The committee met with Mr. C. G. Van Vliet and Dean Schooler for the purpose of discussing arrangements for the Midseason Automobile Show to be held in connection with the Iowa State Fair. It was agreed that the three north platforms in Machinery Hall were to be set aside for the Automobile, Truck and Accessory exhibit. The rent to be 15c per square foot or $90 for a full space.

The committee met with Mr. Warsaw, representing the Ford Motor Company, for the purpose of arranging space for the Ford exhibit. The committee visited the grounds with Mr. Warsaw and he was shown Power Hall and also all of the ground between Power Hall and the street car entrance. The charge for this space to be $1,000 for Power Hall and 25c per front foot for the space in the open field. No definite arrangements were made regarding this space.

The committee met with Adjutant General Lasher and made arrangements for the use of the two 350 K. W. transformers.

The following bids were received for publishing the official catalog based on 444 pages, 25 per cent of the expense to be paid by the Iowa State Fair and 75 per cent to be paid by E. L. Keyser and D. J. Tracy, who have the contract for publishing the official catalog:

	8,000 copies	10,000 copies
Advance Printing Company	$3,000	$3,400
James J. Doty Publishing Company	3,100	3,500
Campbell Printing Company	3,100	3,500
Homestead Printing Company	2,650	----------

The committee authorized Mr. Keyser and Mr. Tracy to let this contract to the Homestead Printing Company as per above bid.

The committee met with Professor P. C. Taff and F. P. Reed for the purpose of making final arrangement for handling the mess hall for the boys and girls taking part in club work. It was agreed that the State Fair management would turn over floral hall for this purpose. Remove the old tables, shelving, etc., and place the floor in reasonably good repair. Also build in the necessary tables, counters, wash racks, etc., and provide one large range and one large refrigerator which were to be borrowed from the adjutant general's department. The superintendents of the department, Mr. Taff and Mr. Reed were authorized to arrange for a manager of the mess hall and the same to be operated so that the expense of operation will be taken care of by the charge made for meals. They also to arrange for the necessary dishes, cooking utensils and other equipment.

The secretary was authorized to employ Harry Strandholm as chef of the club dining hall. The budget for the help in the dining hall, including the salary of the chef, not to exceed $650.

President Cameron appointed Mr. Sears McHenry to succeed Mr. F. E. Sheldon on the auditing committee.

The committee with the superintendent of grounds made a thorough investigation of the proposed roads leading out of the camp grounds. The committee decided to improve the road leading from the camp grounds near the game keeper's cottage to Dean Avenue, and directing the superintendent of grounds to do the necessary grading and cindering of same.

The secretary was authorized to pay the dues amounting to $25 issued by the organization known as the National Association of Commissioners and Secretaries of Agriculture.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING

July 11-12, 1922

Members present: Mullen and Corey.

The committee met with Mr. Warsaw and Mr. Edmonds of the Ford Motor Company for the purpose of arranging space for their exhibit during the State Fair.

The committee and representatives of the Ford Motor Company visited the fair grounds and it was decided that they should have all of power hall for a rental of $1,000; the 80 feet of open space west of power hall and one-half of the block, 150x260 feet north of power hall. The outside space to be paid for at 25c per front foot.

The board of control submitted their bids for constructing booths in the grand stand exhibit room. The lumber bill amounted to $1,100 and labor $610. As per previous arrangements by the executive committee it was agreed that the State Fair would pay for the lumber and other material and the board of control would pay for the labor.

EXECUTIVE COMMITTEE MEETING

July 20-21, 1922

Members present: Cameron, Mullen and Corey.

The committee appropriated $150 for the purpose of bringing the Madrid Boy Scout band, consisting of 40 pieces, to the Iowa State Fair.

The secretary presented a communication from Dr. Means stating that it would be necessary for her to make a special trip from New York City to Des Moines to take charge of the baby health department. She also asked that the board pay her actual expenses while on this trip in lieu of any per diem for services as medical director of the baby health department. The committee granted this request.

The proposition to bring two loan art exhibits to the Iowa State Fair at an expense of $200 and transportation as submitted by Prof. Cumming, superintendent of the art department, was approved by the committee.

The following plan and budget for decorating the agricultural building was approved by the committee:

The Wingate Company for placing bunting decorations in the ceiling, $200. Fred Heathershaw for decorating band stand and back walls with grain and agricultural products, $350. It was also the understanding that this will compensate Mr. Heathershaw for his service as assistant superintendent of the agricultural department from August 15 until all exhibits are returned at the close of the fair. Wilson Floral Company for furnishing southern smilax for decorating columns, and for palms, ferns and plants used in decorating the building, also to take care of a rental charge of $75 for the use of trellis used on columns, for the sum of $300.

The secretary was authorized to accept the proposition of the Kirkman Rolling and Adjustable Trellis Company which provided that upon payment of $50 in addition to the $75 rent paid by the Wilson Floral Company, and also granting said company the use of a small booth in the agricultural building in which to demonstrate and sell the trellis, the trellis to become the property of the State Fair. Said company also agrees to take down the trellis, repaint and replace it for the next five years for a space to demonstrate and sell the trellis in the agricultural building.

The secretary was authorized to complete the horseshoe pitching courts, this to include setting the posts and roping off the grounds, provide the bleachers and all necessary supplies as required by Mr. Leighton, the tournament manager. The committee also agreed that where a manufacturer of horseshoes contributed a trophy valued at not less than $25 that they were to be granted free space for exhibiting and selling their shoes.

The communication from the highway commission in which they offered to permanently assign 90 or 100 pyramid tents, 16x16 feet, was presented to the committee. The committee authorized the secretary to make arrangements for 90 of these tents to be used in taking care of the overflow of boys and girls in the dormitory, also the boy scouts which help in the various departments. The secretary was authorized to purchase, not to exceed, 200 wire cots and 200 bed sacks.

The committee with Dean Curtiss visited the fair grounds for the purpose of working out a plan to provide box seats in the stock pavilion. It was decided to build sixteen boxes, providing six seats each, on the west side, and also the same number on the east side of the pavilion.

Mr. F. E. Van Alstine representing the Fischer Flying Circus, placed a proposition to bring a flying circus to the Iowa State Fair, and to make the following flights:

Day flights to consist of stunt flying, parachute drops from aeroplane, aero combat between two planes, also an illuminated night flight, not less than three displays of fireworks attached to plane. The cost to be $600 for the night flights and $100 and the exclusive passenger carrying privilege for the day flights.

The committee accepted the proposition made by Mr. Van Alstine and authorized the secretary to execute the contract.

The secretary was authorized to employ an assistant in the publicity department qualified to write up and give the proper publicity to the live stock end of the show.

The committee with Mr. Fairall visited the Des Moines daily newspaper offices and discussed plans for this year's fair and solicited the co-operation of the newspapers in giving the fair the proper publicity.

The committee agreed to meet on August 3 and the secretary was directed to notify Mr. J. C. Beckner, superintendent of the admissions department, and Mr. C. E. Hoffman, superintendent of the public safety department, to meet with the committee at that time for the purpose of going over the details of their departments.

The committee met with Mr. Waymack, managing editor of the Register and discussed plans for the final judging in the state-wide beauty contest and the entertainment of the girls in the contest.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING

August 3-4, 1922.

Members present: Cameron, Mullen and Corey.

The committee met with Cyrus Harvey, Dr. Holmes of Drake University, Mr. Vaughn, Des Moines University and Mr. Dean of Simpson College and discussed a plan for the sectarian colleges to make an exhibit and headquarters at the fair.

It was agreed that these colleges were to be assigned five full spaces in machinery hall and that all colleges were to be invited to occupy this space with exhibits. The space to be donated and one ticket issued for a representative of each college.

The committee accepted the proposition of the Thomas Electric Company to furnish three loud speaking machines and install same in front of grand stand, also install and operate a broadcasting station on the fair grounds during the fair for the sum of $200.00.

The committee authorized the secretary to employ T. Fred Henry's orchestra at $492 to play in the agricultural building and stock pavilion, alternating with the Page County Band.

The committee agreed to assign one-half space in machinery hall to the Des Moines Automobile Club for the purpose of maintaining a road information bureau for State Fair visitors.

Also the Chamber of Commerce a 35 foot space under the overhanging roof of machinery hall on the east side near the northeast entrance.

The committee accepted the proposition of F. M. Barnes to deduct $500 from his contract and cancel the act "Ballet of Jewels."

The committee met with representatives of the Register and Tribune for the purpose of making arrangements for the beauty contest.

The committee approved payment of bills.

SPECIAL COMMITTEE MEETINGS

August 14, 1922.

Mr. H. L. Pike, superintendent of the cattle department, assigned stalls in the cattle department.

August 14-15, 1922.

Mr. C. F. Curtiss, superintendent of the horse department, and Mr. Joe McCoy, assistant superintendent, assigned stalls in the horse department, and also arranged the daily judging program, and the program for the four night horse shows.

August 16, 1922.

Mr. Cyrus A. Tow, superintendent of the swine department, assigned pens in the swine department.

IN VACATION

As per instructions of the executive committee the secretary made contract with T. Fred Henry for a seven piece orchestra for seven days for $492 to play concerts in the agricultural building and stock pavilion.

As per instructions of the executive committee the secretary made arrangements with Mrs. I. H. Tomlinson to serve as chaperone and hostess to the girls entered in the beauty contest for the sum of $100.

Space 20 x 35 feet was assigned to the U. S. Navy in machinery department. An order was placed with the Seick Tent & Awning Company for a new awning of 12 ounce duck for enclosing the south side of the exhibit room under the grandstand for the sum of $225.

The following bids were received for furnishing canvas for large canvas sign 12 x 94 feet of 10 ounce duck to be placed on back of grandstand advertising Night Show:

Stoner McCray Company	$105.00
Des Moines Tent & Awning Company	95.00
Seick Tent & Awning Company	67.68

Contract was awarded to the Seick Tent & Awning Company on the above figures. Contract was given the Stoner McCray Company for painting large canvas sign for the sum of $150.

EXECUTIVE COMMITTEE MEETING

August 19—September 2, 1922, Inc.

The executive committee held no regular meetings during the period of the fair.

The committee approved payment of all bills and contracts made during the period of the fair, and also such other matters that were brought to their attention for adjustment.

MEETING STATE BOARD OF AGRICULTURE

Wednesday, August 30, 1922.

Board Room, Administration Building, 10:15 P. M.

As per the call of the president the board convened in the board room at 10:15 p. m. with the following members present: Cameron, Mullen, Corey, Sheldon, Weaver, Davis, Ferris, Curtin, Tow, Legoe, Beckner, Hoffman, McHenry and Pike. For the purpose of considering the following protest filed by A. J. Blakely & Son:

August 30, 1922.

To the Iowa State Board of Agriculture,
Des Moines, Iowa.
Gentlemen:

The undersigned exhibitor at the Iowa State Fair hereby formally protests the eligibility of sheep labeled A. F. Arnold to compete in the "Iowa Specials," Divisions No. 46 and No. 48, under the entry of Warner, Hill and Arnold exhibitors.

Similarly, the sheep labeled O. F. Warner are protested to compete in the "Iowa Specials," Divisions No. 46 and 48, under the entry Hanson & Warner exhibitors.

The sheep exhibited by Warner, Hill & Arnold carrying ear tags A. F. Arnold, are registered in the American & Delaine Merino Record Association as bred by A. F. Arnold, and the sheep exhibited by Hanson & Warner, carrying ear tags O. F. Warner, are registered in the American & Delaine Merino Record Association as bred by O. F. Warner.

Evidence will follow.

(Signed) A. J. Blakely & Son,
by
A. J. Blakely Jr.

August 28, 1922.

A. J. Blakely, Jr.,
Des Moines, Iowa.
Dear Sir:

Warner, Hill & Arnold have never recorded any sheep in this association but I find they have had the following sheep transferred to Warner & Hill: A. F. Arnold Nos. 527, 563 & 544. 1920 correct Nos. 584 & 539; Nos. 607 & 546; Nos. 492 & 498; Nos. 589, 563 & 544. Nos. 624 & 652 born 1922. No. 415 born 1919 and No. 371 born 1917. Nos. 388 & 393 born 1918. Numbers not mentioned as to year born are correct. Nos. 51, 44, 5, 33, 38 & 39 are recorded as O. R. Warner and have not been transferred. Ages are correct on these numbers.

Hope this gives you the necessary information.

American and Delaine-Merino Record Ass'n.,
(Signed) Gowdy Williamson.

Mr. A. J. Blakely Jr. appeared before the board and explained why the protest was filed, and why the sheep entered in the name of Warner, Hill & Arnold and the sheep entered in the name of Hanson & Warner were not entitled to be shown in the Iowa Specials Divisions. Mr. O. F. Warner appeared before the board and explained his position and admitted under the strict interpretation of the rules governing the eligibility of sheep shown in the Iowa divisions that the sheep entered in the name of Warner, Hill & Arnold and the sheep entered in the name of Hanson & Warner, were not eligible to these classes.

On motion duly made, seconded and carried the protest was sustained and the secretary was instructed to return the $20 deposit to Mr. Blakely and Superintendent Davis was instructed to correct the awards in these divisions eliminating the herds shown by Warner, Hill & Arnold and Hanson & Warner.

Upon motion the board adjourned.

MEETING STATE BOARD OF AGRICULTURE

Thursday, August 31, 1922.
Board Room, Administration Building, 8:00 P. M.

As per the call of the president the board convened in the board room of the administration building at 8:00 p. m. with the following members present: Cameron, Mullen, Corey, Sheldon, Weaver, Davis, Ferris, Curtin, Tow, Legoe, Curtiss, Beckner, Hoffman, McHenry and Pike.

The purpose of the meeting was to present the pay rolls of the various superintendents for approval of the board. The following pay rolls were presented and for the information of the board the secretary also presented the amount of the budget for each pay roll as appropriated and approved by the board at the February meeting, also the amount of 1921 pay rolls for comparison.

Department	Pay Roll 1921 Fair	Budget 1922 Fair	Pay Roll 1922 Fair
Treasurer	$ 3,967	$ 2,700	$ 2,891.00
Admissions	6,318	4,600	4,574.35
Admissions—Ushers	1,348	1,000	900.00
Police	4,428	3,500	3,284.20
Concession	3,124	2,500	2,457.00
Horse	1,994	1,500	1,582.40
Cattle	1,575	1,250	1,403.75
Swine	1,019	750	962.50
Sheep	654	500	622.00
Poultry	490	400	399.50
Machinery	1,560	850	848.22
Agricultural	1,218	750	820.00
Horticultural	589	450	576.60
Speed	1,316	970	989.50
Textile and China	665	500	471.00
Educational	334	250	256.00
Ticket Auditing	479	350	325.00
Boys and Girls' Club	1,292	900	989.25
Boys and Girls' Judging Contest	102	75	60.00
Baby Health	1,332	950	1,167.02
W. and C. Building Program Com.	1,038	800	520.73
Day Nursery	222	200	144.00
Campers Headquarters	387	175	174.00
Property Men	447	400	278.20
Art	285	225	261.42
Awards	92	100	134.50
Forage	912	750	700.67
	$37,186	$27,395	$27,792.81

On motion duly made by Mr. Weaver and seconded by Mr. Ferris the pay rolls as presented were approved by the board and the secretary was instructed to issue an expense warrant covering the amount of each pay roll and deposit same with the Central State Bank to the credit of the superintendent's pay roll account.

The superintendents were directed to issue pay roll checks to the employes in their respective departments signing the checks "Iowa Department of Agriculture, Per.................................., Superintendent."

Mr. Mullen presented the following resolution pertaining to the press and beauty contest and moved their adoption:

WHEREAS, The search conducted during the last ten months to find the most beautiful girl in the State of Iowa, to be crowned queen of the 1922 Iowa State Fair, has been eminently successful, and

WHEREAS, The manner of conducting this search and the impartiality in the selection of the winner have met with the commendation of the State at large, therefore,

BE IT RESOLVED, That the Iowa State Board of Agriculture hereby extend a sincere expression of appreciation to the Des Moines Register for the splendid assistance given in conducting this search. The State Board of Agriculture feels that the Des Moines Register has performed a splendid service in this, has conducted the contest on a particularly dignified plane, and has, in the publicity given to the contest and to the Iowa State Fair, done a splendid piece of work.

Resolutions to the Press of the State of Iowa.

WHEREAS, The Iowa State Board of Agriculture, constituting the board of managers of the Iowa State Fair and Exposition, feels that through their cooperation the newspapers of the State of Iowa have rendered a great service and contributed materially to the success of the 1922 Iowa State Fair, and

WHEREAS, The Iowa State Fair and Exposition, being a state institution, the property of the people of Iowa and representing the achievements of this great state, holds a position which makes its success of direct interest to every citizen of Iowa, and

WHEREAS, The Iowa State Board of Agriculture wishes to make known its appreciation of this support by the press, both in its own behalf and in behalf of the citizens of the State of Iowa who are the direct owners of the exposition, therefore,

BE IT RESOLVED, That the Iowa State Board of Agriculture hereby extend to the newspapers, farm papers and other publications of Iowa, a sincere expression of appreciation for their splendid assistance in making the 1922 Iowa State Fair and Exposition the crowning success which it has been.

The motion was seconded by Mr. McHenry and unanimously adopted.

Upon motion the Board adjourned.

MEETING STATE BOARD OF AGRICULTURE

Friday, September 1, 1922

Board Room, Administration Building, 8:30 P. M.

As per the call of the president the board convened at 8:30 p. m. in the board room of the administration building. Upon roll call the following members responded: Cameron, Corey, Sheldon, Weaver, Davis, Ferris, Curtin, Tow, Legoe, Curtiss, Beckner, Hoffman, McHenry and Pike. Mr. Mullen having been excused for the purpose of attending the meeting of the National Horseshoe Pitchers' Association at the Randolph hotel, at which time the prizes and trophies awarded in the national and state tournaments were to be awarded to the winners.

C. F. Curtiss presented the pay roll of the horse department for $1,582.40. On motion duly made, seconded and carried the pay roll as presented was approved.

EXECUTIVE COMMITTEE MEETING

September 26-27, 1922

Members present, Cameron, Mullen and Corey.

The committee approved the pay roll and expense account submitted by Mrs. I. H. Tomlinson for the beauty contest. This to include $50 additional to Mrs. Tomlinson on account of extra services she was asked to render in the matter of selecting judges, arranging for the pageant, etc.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING

October 12-13, 1922

The committee met with members Cameron, Mullen and Corey present.

The committee approved payment of the bill rendered by the board of control for the state fair's share of expense in building exhibit booths under the grand stand, amounting to $1,310.50.

The communication from the Independent Tent & Awning Company along with a statement of the business they did on the state fair grounds during the 1922 state fair was brought to the attention of the committee. The secretary was directed to notify the Independent Tent & Awning Company that they would be expected to pay a concession of 10%, amounting to $100, on the business they did during the 1922 fair.

The application for a concession for the 1923 fair to be taken up immediately after the board meeting on December 14th.

The communication from Frederica Shattuck who had charge of the little country theatre, was presented to the committee. The statement showed that the total receipts were $451.60, but did not include an itemized statement covering the operating expenses. Inasmuch as the committee had agreed to make up any deficit in the operating expense up to $800, the secretary was directed to secure an itemized statement showing the actual cost of operating the little country theatre, and issue a warrant covering the difference between the receipts and the actual operating expense provided that it did not exceed $348.40.

The secretary presented a list and budget covering planting at the state fair grounds that Mr. Foglesong recommended be done this fall amounting to $231.35. The committee approved the budget.

SPECIAL COMMITTEE MEETING

October 25, 1922

The meeting of the special committee consisted of the executive committee, Mr. A. C. Tow, superintendent of the swine department and Mr. J. C. Duncan, assistant superintendent, called for the purpose of giving Mr. L. H. Glover of Grandview, Missouri, an opportunity to be heard regarding the 1922 Iowa State Fair. The evidence produced showed that the sow Revelation's Best 298024, shown as a substitute entry at the 1922 Iowa State Fair by L. H. Glover was in fact owned by L. H. Glover and Sophian Farms at the time entries closed at the Iowa State Fair.

Said sow was shown and won first place at the Missouri State Fair by the Sophian Farms, and was also entered at the Iowa State Fair by Sophian Farms. After a full hearing and Mr. Glover admitted the facts as set out above, Mr. Mullen offered the following motion which was seconded by Mr. Tow and adopted: Resolved that the Iowa State Fair withhold the $15, first prize won by L. H. Glover on the sow Revelation's Best 298024, in the class for senior yearling sow, also the third prize of $8 for the aged herd, bred and owned by exhibitor, which herd included the sow Revelation's Best.

This action was taken in accordance with rules 8 and 10 published in the 1922 Iowa State Fair premium list, which provides that all animals must be entered in the name of the bona fide owner and that all animals must be owned by the exhibitor at the time entries close.

By motion duly made, seconded and carried, Mr. Glover was requested and consented to refund the $15 paid him at the close of the Iowa State Fair in 1921 on account of showing the boar "Tyes Liberater" in the aged herd class by Glover and Moore. Said showing being in violation of rules 8 and 10 of the 1921 Iowa State Fair.

The secretary was authorized to deduct the sum of $38 as above enumerated from Mr. Glover's winnings and pay him the balance amounting to $125.00.

EXECUTIVE COMMITTEE MEETING

October 25-26, 1922

Members present, Cameron, Mullen and Corey.

The secretary and superintendent of grounds were also directed to arrange with the Seick Tent & Awning Company for moving the three buildings owned by said company, about 100 feet west, and to move the Grand Avenue entrance to the camp grounds about 50 feet west.

A communication from the governor calling for a budget for the years 1922 and 1923 was brought to the attention of the committee. It was agreed that the board should recommend $2,000 for insurance; $2,400 for the support of the department of agriculture and $15,000 for maintenance of state fair grounds and buildings annually.

The committee went over the schedule of insurance on buildings at the state fair grounds and directed the secretary to place the following additional insurance: $1,000 fire and tornado on farm houses; $5,000 fire and tornado on secretary's residence. The above insurance to be placed in the Town Mutual Insurance Company. $10,000 additional fire and tornado on women and children's building.

The secretary brought to the attention of the committee the fact that the Des Moines city council had received bids on Monday, October 23rd, for paving Dean Avenue from 30th to 34th street, and that the specifications provided that the work was to be completed within thirty days. Inasmuch as the executive committee had already recommended that a hard surface pavement be laid along the state fair grounds, they did not deem it advisable to agree to laying any pavement this fall for the reason that it would be impossible to complete same before freezing weather. The secretary was directed to co-operate with the attorney general in protesting against the letting of this contract until 1923.

AUDITING COMMITTEE MEETING

November 17 and 21

Members of the auditing committee Pike, Davis and McHenry audited all bills on file on November 17th and 21st.

MEETING OF THE STATE BOARD OF AGRICULTURE

December 14, 1922

The board convened at 9:30 o'clock a. m. with President Cameron presiding. The following members responded to roll call: C. E. Cameron, J. P. Mullen, A. R. Corey, F. E. Sheldon, H. O. Weaver, E. T. Davis, Earl Ferris, E. J. Curtin, C. F. Curtiss, C. A. Tow, J. C. Beckner, Carl E. Hoffman, Sears McHenry and H. L. Pike.

The secretary read the minutes of the board and executive committee meetings commencing with the board meeting held March 7th and 8th, 1922, and concluded with the auditing committee meeting held November 21st, 1922. There being no corrections or additions to the minutes, President Cameron announced that the minutes would stand approved as read.

The secretary presented the report of the state accountant, Mr. F. H. Paul, which had been filed with the president of the board, omitting the financial statement and other tabulations accompanying the same as they were simply a duplicate of the financial statement and other comparative statements found in the report of the secretary.

TO THE EXECUTIVE COUNCIL OF IOWA AND BOARD OF DIRECTORS OF THE IOWA DEPARTMENT OF AGRICULTURE

Gentlemen: The following is a report of the examination of the Iowa Department of Agriculture, for the period from December 1, 1921, to November 30, 1922.

IOWA DEPARTMENT OF AGRICULTURE

The examination of this department covers a period from December 1st, 1921, to November 30th, 1922.

The examination and audit of this department is made in compliance with the statutes of this state, requiring the same to be made before the board meeting in December of each year.

In making the examination, check and audit, we have checked all sources from which revenue of the department is received.

The records show that all funds from whatever source received have been turned over to the treasurer of the department and fully accounted for. All claims for expense and maintenance for the fair and department have been examined and all premium awards have been carefully examined to ascertain if properly executed, the proper approval made thereof and the record approval by the board made before payment was made.

The checks issued by the treasurer of the department for payment of claims filed and approved, for expenses and the maintenance of the fair and the premium awards made and approved, have been checked against each and compared to ascertain if proper payments were made. A number of checks issued by the treasurer are outstanding, not having been presented for payment. A list of such and all outstanding checks and warrants is submitted herewith.

The buildings on the grounds are kept insured in companies authorized to transact business in this state. The amount of fire insurance in force on buildings, including secretary's house and barn, amounts to the sum of $218,500.00. The tornado insurance in force on buildings on the grounds amount to the sum of $271,500.00. The premiums paid on both amount to the sum of $6,808.39. These policies expire in 1923, 1924, 1925 and 1927 as shown by statement submitted herewith.

The boys and girls in the public schools of the state, in their spelling contest, manifest the same enthusiasm as ever. It is one of the drawing attractions of the fair. The names of the boys and girls winning places in the contest are submitted herewith.

Your attention is called to the comparative tables, showing the receipts and disbursements of the fair for the years 1921 and 1922. It will be seen that the receipts for 1922 were $313,259.49 and those for the year 1921 were $297,695.25, a gain of $15,564.24.

The total premium awards for 1922 fair were $104,521.65 and those for 1921 were $120,427.64, a decrease of $15,905.99. The total expense of the fair, other than improvements, maintenance of grounds and premium awards were for 1922 the sum of $161,753.46, that for the year 1921 were $173,696.63, a decrease of $11,943.17.

The total receipts from all sources for the fair of 1922 including cash balance at the close of the previous year, was $349,235.33, that for the year 1921 was $419,740.55, a decrease of $70,505.22.

The total disbursements for all purposes for the year 1922 was $314,670.16, that for the year 1921 was $395,680.53, showing a saving of $81,010.37 over last year in expenses.

The records and books of the secretary and treasurer of the department, showing the number and value of tickets issued, sold and returned, have been carefully checked and reconciled, a full accounting having been made. The records kept of non-paid admissions to the grounds, grand stand, and stock pavilion have been checked and a statement of the same is submitted herewith. The free list shows an increase over that of last year. A copy of the inventory taken in 1921 is submitted herewith showing the assets and liabilities. The inventory for 1922 is not yet completed.

The records show that there was received, from fees received for the registration of stallions and jacks, the sum of $3,877.00. This amount was turned over to the treasurer of the department, a statement of the same is submitted herewith. The over-payment to Geo. E. Whitney of $2.00 shown in last year's report has been returned to the treasurer of the department. A few errors were found, but have been corrected.

In the early part of the year the board met and adopted a budget for each department of the fair, fixing a total of $146,620.00 as the expenses for the year 1922 fair. After this had been adopted they took on the train wreck, which cost the association $12,650.00, making a total of $159,270.00. The records show that the total expense of the fair, other than premiums, was $161,753.46, which exceeded the budget in the sum of $1,483.46.

The board is to be commended for adopting a budget, for the expense of the fair, and should each year make up and adopt a budget, for each department and so supervise the expense of the department, that it carries on its work within the amount set apart for it.

The records and books of the department are well kept and up to date. A trial balance is taken each month.

F. H. PAUL, Accountant.
H. E. CROFT,
LOO LOO M. PAGE, Assistants.

There being no further business to come before the old board, the president announced that a motion to adjourn sine die would be in order.

On motion duly made, seconded and carried the board adjourned sine die.

The new board immediately convened and Mr. B. W. Garrett, clerk of the supreme court, administered the oath of office to the following newly elected officers and members of the state board of agriculture: C. E. Cameron, J. P. Mullen, E. T. Davis, E. J. Curtin, C. Ed. Beman, J. C. Beckner and Sears McHenry.

The roll was called and the following members responded: C. E. Cameron, J. P. Mullen, A. R. Corey, F. E. Sheldon, H. O. Weaver, E. T. Davis, Earl Ferris, E. J. Curtin, C. A. Tow, C. F. Curtiss, C. Ed. Beman, J. C. Beckner, Carl E. Hoffman, Sears McHenry and H. L. Pike.

The president announced that the next order of business would be the election of a secretary and treasurer.

Mr. H. C. Weaver moved that A. R. Corey be re-elected secretary at a salary of $4,000.00 per year as provided by law and that he be required to give a surety bond of $10,000.00, the premium to be paid out of the state fair fund. In addition to the salary fixed by law the secretary to be given the use of the house on the state fair grounds, also gasoline and maintenance for automobile owned by the secretary and used in part for state business. The motion was seconded by Mr. Sheldon and unanimously adopted.

President Cameron declared Mr. A. R. Corey duly elected secretary for the ensuing year.

Mr. Sears McHenry moved that Mr. F. E. Sheldon be elected treasurer to succeed himself for the ensuing year at a salary of $250 per year and traveling expenses as provided by law, and that he be required to give a personal bond of $100,000 to be approved by the board and filed with the secretary. Motion was seconded by Secretary Corey and unanimously adopted.

President Cameron declared Mr. Sheldon of Ringgold county duly elected treasurer for the ensuing year.

Mr. Pike moved that the executive committee be authorized to employ a superintendent of grounds at not to exceed $1,800 per year.

Mr. C. A. Tow moved that the executive committee recommend a list of superintendents for the various departments and report at the afternoon meeting. Motion was seconded by Mr. Davis and carried.

The matter of fixing the dates for the 1923 Iowa State Fair was discussed by the board. They were informed that the executive committee had claimed the same relative dates at the meeting of the International Association of fairs held in Toronto, Canada, on November 29th.

Mr. McHenry moved that the dates for the 1923 Iowa State Fair be set for August 22 to 31 inclusive, August 22 and 23 to be preparation days and the same admission fee charged as at the 1922 fair. Motion was seconded by Mr. Hoffman and unanimously adopted.

Mr. R. F. O'Donnell of Mason City, representing the county agents and Mr. John A. Day, special representative of the Iowa Beef Producers association, appeared before the board and presented the request of the two organizations mentioned above, for better accommodations to house the boys and girls' calf club exhibit and the boys and girls' pig club exhibit. They were of the opinion that at least 400 additional pens should be provided for the pig club exhibit and stalls for not less than 750 head of calves as they anticipate this number will be on exhibition at the 1923 Iowa State Fair. They also stated that they realized it would be necessary to secure a state appropriation to make these improvements and that they would be glad to co-operate with the board in securing such an appropriation.

Mr. O'Donnell also suggested that it would be more satisfactory if a judging program was arranged so that the pigs and calves would not be judged at the same time as it is quite necessary for the county agent or club leader to be with the boys and girls at the time the judging of both takes place. He also indicated that they should have at least a day and one-half for judging the baby beeves at the 1923 State Fair. The suggestion was also made that the privileges of the boys and girls dormitories be limited to the boys and girls exhibiting live stock and on the demonstration teams. Mr. O'Connell also stated that at the county agents' conference at Ames a short time ago, steps were taken to increase the exhibit in the pure bred heifer division.

The board recessed until 1:30 p. m.

The board having accepted the invitation of the Greater Des Moines Committee, proceeded to the Des Moines club where lunch was served. Short addresses were given by President Cameron, Secretary Corey, E.

T. Meredith, Harvey Ingham and J. P. Wallace. The Greater Des Moines Committee, through its chairman and other members, expressed its desire to co-operate with the fair management in stimulating more local interest in the state fair.

Afternoon Session, 1:30 p. m.

Mr. Pike moved that the management of the 1923 Iowa State Fair be delegated to the executive committee and elective members of the board as provided by law. The motion was seconded by Mr. Davis and adopted.

The secretary informed the board that it would be necessary to publish the premium list for the educational department at an early date in order that it may be placed in the hands of the schools shortly after the first of January.

Mr. Weaver moved that the secretary be authorized to publish the educational premium list and that there be appropriated for prizes not to exceed $850. Motion was seconded by Mr. Curtiss and adopted.

The executive committee recommended the following list of superintendents for the 1923 fair:

Public Safety—Carl E. Hoffman.
Admissions—C. Ed. Beman.
Concessions and Privileges—Sears McHenry.
Horses—C. F. Curtiss.
Speed—E. J. Curtin.
Cattle—H. L. Pike.
Swine—C. A. Tow.
Sheep—E. T. Davis.
Implements and Machinery—J. P. Mullen.
Agriculture—H. O. Weaver.
Dairy—R. G. Clark.
Horticulture—Earl Ferris.
Exposition Building—J. C. Beckner.

Mr. McHenry moved that the list of superintendents as recommended by the executive committee be approved by the board. Motion was seconded by Mr. Curtiss and carried.

The secretary informed the board of the exhibit put on by the U. S. Department of Agriculture at the recent international live stock exposition. This educational exhibit consists of 21 booths 15 feet wide and 10 feet deep and covers the activities of the U. S. Department of Agriculture. The secretary also suggested that there was a possibility of securing this exhibit for the 1923 Iowa State Fair providing the management furnish a suitable building and make application for same at an early date.

Mr. Davis moved that the secretary be instructed to communicate with secretary Wallace requesting that this exhibit be sent to the Iowa State Fair this year. Motion was seconded by Mr. Ferris and adopted.

Miss Neale S. Knowles appeared before the board and explained the county project exhibits that are being put on by the farm bureau women of the state. Miss Knowles stated that in 1922 twelve of these exhibits were put on at the state fair in the room assigned to the home economics department in the women's building, and in the hallway just outside of this room. She also stated that it cost in the neighborhood of $75 or $100 to bring the home demonstration agent to the fair for the purpose of putting on and explaining these exhibits, and that she would like to interest the board in offering premiums for such exhibits. She further stated that she should have more space. The exhibits to be scored by a score card and no exhibit to receive a premium unless it scored at least 500 points out of a possible 1000 points. She also stated that if no other space was available that by partition through the home economics class room it would be possible to take care of 18 county exhibits and that 18 counties had already indicated that they would make an exhibit at the 1923 fair.

Mr. Hoffman moved that $500 be appropriated as prizes for the County Project exhibits put on by the Farm Bureau women as outlined by Miss Knowles. Motion was seconded by Mr. Pike and unanimously adopted.

Mr. F. E. Sheldon presented his bond of $100,000 signed by himself, Grant McPherrin, L. W. Grimes and Simon Casady. Mr. McHenry moved that the bond presented by Mr. Sheldon be approved by the board and filed with the secretary.

Motion was seconded by Mr. Mullen and unanimously adopted.

The secretary presented the following suggestions for taking care of the boys and girls' calf club and pig club exhibits:

It is quite evident to every member of the board that the boys and girls' club department has grown beyond our expectations. This is especially true of the calf and pig club departments.

It is not necessary to present any argument as to the merit of this work. Over eight hundred farm boys and girls took an active part in this year's fair either by making an exhibit or as a member of a judging or demonstration team.

The most important features of this department are the calf and pig club exhibits. The board must realize if these exhibits are to grow or even maintain the present standard, more suitable quarters must be provided for taking care of them. The tent in which the pigs have been exhibited is not only an expensive proposition each year, but in case of rain or warm weather, is very unsatisfactory to the boys and girls showing their pigs.

This year a wonderful exhibit of 350 head of baby beeves was crowded out of the cattle barn into the old nurse cow sheds. These quarters were not satisfactory to the boys and girls and were never intended to house exhibition stock. They are in the back yard and seldom visited by the public.

I believe the board should at this meeting decide upon some definite plan for taking care of these exhibits. The legislature should be asked to appropriate sufficient funds to make these improvements. It should not be a difficult matter to figure out a plan to provide the additional pens in the court of the swine barn and it would not be expensive construction.

The matter of providing quarters for the calf club exhibit is a more difficult problem. Suitable quarters for this exhibit might be provided by completing the sheep barn and using the west half for this purpose. The uncompleted section would be 140x232 feet and would provide stalls for 500 head of calves. It would be inexpensive construction, as the two main entrances were completed at the time the first section was built.

At this time the various propositions were thoroughly discussed by the board. It was the unanimous opinion of the board that if the additional pens were to be added to the swine pavilion that the present judging ring should be moved to the center so that when the barn was completed the pens would entirely surround the judging ring. The board also agreed that the most economical plan for taking care of the calf club exhibit would be to complete the sheep barn and use the new section for housing this exhibit. Mr. Davis moved that the executive committee have the architect prepare sketches for the completion of the sheep barn and for moving the judging ring in the swine pavilion and providing the additional pens. And that the executive committee be requested to present the matter to the legislature for their consideration.

Motion was seconded by Mr. McHenry and unanimously adopted.

President Cameron informed the board that the executive committee had transmitted to the governor a request in the form of a budget asking for $2,000 per year to take care of insurance premiums on buildings and $15,000 annually for improvements, maintenance and repairs to buildings on the state fair grounds. The purpose of the latter item is to replace the roofs on the present swine barn, grandstand and porches of the administration building and to make the necessary repairs to the gravel roof on machinery hall, etc.

The secretary presented a communication from the Hawkeye Fair and Exposition at Fort Dodge and also the traffic manager of the secretary of the chamber of commerce at Fort Dodge, in which they request that some arrangements be made whereby the live stock exhibited at the Hawkeye Fair and Exposition might be accepted at the Iowa State Fair Saturday morning instead of Friday morning. The matter was thoroughly discussed by the board and the conclusion was reached that it would be impossible to complete the judging at the Iowa State Fair unless the boys' and girls' pigs and calves were judged the first week of the fair, but that it would be satisfactory to accept the live stock entered in the open classes any time Saturday, August 25th.

Mr. Curtiss moved that Rule 15 of the 1922 premium list be revised to read as follows: "Exhibitors of live stock not making a circuit of state, county or district fairs should be on the grounds not later than 9:00 o'clock a. m., Friday, August 24th, and all exhibits other than live stock not later than 6:00 o'clock p. m., Thursday, August 23d, except as otherwise provided for in special rules."

Motion was seconded by Mr. Pike and adopted.

Mr. McHenry moved that all unfinished business and any other business necessary in making arrangements for properly conducting the 1923 Iowa State Fair be delegated to the executive committee with power to act.

Motion was seconded by Mr. Ferris and carried.

On motion duly made, seconded and carried the board adjourned to meet at the call of the president.

EXECUTIVE COMMITTEE MEETING

December 15, 1922

Members present: Cameron, Mullen and Corey.

The secretary was authorized to pay J. S. Connolly $500, balance due on contract for train wreck.

The secretary was also instructed to get in touch with Keffer & Jones at an early date and have sketches prepared for completing the sheep barn and also the changes as contemplated in the swine barn and judging pavilion.

PART II

Fifteenth Annual Meeting Iowa Fair Managers' Association, Des Moines, Iowa, December 12, 1922

The meeting was called to order at 10:00 a. m. by President E. S. Estel. The roll was called and the convention took up the matters to be considered.

President E. S. Estel: At this time I will appoint as the Committee on Credentials Mr. J. C. Beckner, Chairman; Mr. Charles H. Barber and Mr. F. B. Selby. As the Committee on Resolutions I will appoint Mr. S. D. Quarton, Chairman, Mr. H. S. Stanbery and Mr. E. W. Williams.

There are a number of matters I believe should receive the attention of the members. In reviewing the minutes of the various meetings held for the past two or three years, the officers found that there was nothing which stated the legality of members in this organization. Everyone, whether they have paid their dues or not, have in the past been entitled to a vote. You gentlemen know, I believe, that an organization of this kind must have some regulations and all members must abide by them. It was thought some regulation should be made that no one except those who have paid their dues should be entitled to a vote in the organization. I would be glad to have you discuss that matter at this time briefly, and see if you do not see fit to have a motion made to authorize fixing the membership of the organization.

Mr. M. E. Bacon: I would make a motion that all fairs who have not paid their 1922 dues before roll call this afternoon be not considered members of this Association and not have a vote.

Mr. Don Moore: I second that motion.

President E. S. Estel: You have heard the motion. All in favor of the motion will signify by saying aye. Contrary no. The motion carried.

We will now have the Treasurer's report:

TREASURERS' REPORT.

Des Moines, Iowa, December 11, 1922.

To the Officers and Members of the Iowa Fair Managers' Association:

Gentlemen:

Receipts of 1922.

Received from Ex. Treasurer Gatch	$ 143.39
Received from Secretary Wilkinson	2,471.03
Total receipts	$2,614.42

Expenditures:

Paid Orders 82 to 122, Inc.	$1,674.38
Balance on hand	940.04
	$2,614.42

Respectfully submitted,
(Signed) Roy E. Rowland,
Treasurer Iowa Fair Managers' Association.

President Estel: I believe before we act upon the report of the Treasurer it might be well to have the report of the Secretary and of the Auditing Committee. We will have the Secretary's report of receipts and disbursements for the year.

Report of the Secretary of the Iowa Fair Managers' Association for the year ending December 1, 1922.

RECEIPTS

Cash Received from F. A. Gatch, Treasurer	$ 871.98
Cash Received from M. E. Bacon, Secretary	976.30
1921 Dues Collected	14.72
1922 Dues Collected	923.71
	$276.71

DISBURSEMENTS

Paid to Roy E. Rowland, Treasurer	$2,614.42
Check Returned—"not honored"	20.00
Cash on Hand in Alta State Bank, Alta, Iowa	152.29
	$2,786.71

REPORT OF ORDERS DRAWN ON TREASURER

Expense Legislative Committee—1921	$ 499.01
Expense Entertainment Committee—1921	84.01
Traveling Expense Officers—1921	115.69
Postage—1921	7.00
Total	$ 743.71

Expense of Banquet	$ 301.60
Music for Banquet	75.00
Expense 1921 Annual Meeting	10.50
Secretary Salary—1921	147.66
Postage and Express	16.85
Printing	11.25
Stationery and Supplies	47.50
Dues, International Association Fairs and Expositions	50.00
Total orders drawn	$1,674.38

Respectfully submitted,
IOWA FAIR MANAGERS' ASSOCIATION,
Roy H. Wilkinson,
Secretary.

1916-17-18-19 Dues Uncollected	$501.39
1920-1921 Dues not Collected	225.43
1922 Dues still Unpaid	782.09

President Estel: You have heard the report of the Secretary. Are there any questions you wish to ask him? Before passing on that report we will have the report of the Auditing Committee. In order to hasten our meeting along as much as possible the Auditing Committee was appointed last evening—Mr. Carl E. Hoffman, Chairman, J. P. Mullen and M. E. Bacon. Mr. Hoffman will make his report at this time.

Chairman Carl E. Hoffman:

Des Moines, Iowa, December 12, 1922.

We, the undersigned, duly appointed members of the Auditing Committee of the Iowa Fair Managers' Association, wish to report that we have examined the accounts and reports of the Secretary, and have found the same to be correct as we verily believe.

Signed:
Carl E. Hoffman,
J. P. Mullen,
M. E. Bacon.

President Estel: Before taking up the discussion this morning there is another matter that it seems should receive the attention of this organization. In reviewing the constitution and the by-laws it was found that we hardly have any at all. The constitution is very inadequate at the present time. It is very uncertain, and the officers wish to recommend to this body that a committee to revise the constitution be appointed, and that committee instructed to report at the 1923 annual meeting. I would be glad to have anyone discuss this matter who cares to.

Mr. M. E. Bacon: I would make a motion that the President of the Association appoint a committee of three to draft a new constitution and by-laws, said committee to report back at the next annual meeting of the Iowa Fair Managers' Association to be held in December, 1923.

President Estel: You have heard the motion which has been seconded. All in favor of the motion signify by saying aye. Contrary no. The motion is carried.

Motions were then made that the Auditor's, Secretary's and Treasurer's reports be received and placed on file. Carried.

President Estel: We have requested that the fair secretaries send in questions for a question box to be discussed this morning. The Secretary will read the first question.

Secretary Wilkinson: The first question is, "How many fairs are able to pay the extra cost of the night show proper from the night receipts of the fair?"

President Estel: Let's see the hands of all those who paid. I see various members made a profit. How many of those here lost on their night show? Let's see your hands. Two.

Mr. Henry: We staged a circus at Indianola with home talent. We won out on that.

In the circus we had forty girls on horseback riding horses from around over the county, donated to us. The girls all worked free of charge. We had to send to Chicago for the costumes at a cost of $669. Everything else was donated. We took in $2,595 at the evening show. We had people come from other counties and they thought it was a great show. For the circus horses we used a pair of horses off a coal wagon that hauled coal all day and practiced every night for five weeks. We had high school boys and high school girls and they did very well.

Mr. Gray: I saw Mr. Henry's show and it certainly was a very big show, but I was wondering how many counties in the state had as enthusiastic people who would devote the time to put on a show of that kind.

Mr. Eaton: Would you ask for a show of the fairs that made money out of evening shows and those that did not? I would like to see what proportion of fairs of the state gave no evening shows.

President Estel: Will you please raise your hands? There are nine that gave no evening shows.

Mr. Williams: I would like to ask the Secretary how many men actually keep an account and invoice of expenses so you know from the time your gates open until your show is over just what your night shows costs, a regular invoice so you actually know day after day. I have asked several secretaries and they can't tell me.

President Estel: The hands of those who know what your night show costs you. There are fourteen.

Mr. Clark: The Marshall county fair keeps the gate receipts and ampitheater receipts separate from the day. Commencing at five o'clock in the afternoon a new rate of admission is made at the outside gate and the receipts from then on, and also the grandstand receipts for the evening are kept separate. The past year our free shows, music and fireworks cost us about $4,550 and our receipts after five o'clock from the outside gate and the grandstand were $4,200, so you can see whether we made any money or not, and we had these shows for the afternoon and the music, too.

Mr. Arnold: There is one thing about our night shows. We already have these attractions; the price is absolutely the same whether we put on a night show or not, and we are pretty near compelled to have a night show. I don't think the night show with us has been a great money maker. We put on a picture show besides our general attractions, and I will say this, that we didn't get what we expected.

Mr. Clark: Another feature: it would be worth something on your concessions. If you did not have a night show your concessions would not get as much as when you do have a night show.

Mr. M. E. Bacon: I would like to ask the question of some of these fairs that claim the night show didn't play even, if the night show increased the day attendance. I know one fair in Iowa had not put on a night show, had the largest crowd in the day time the first night they put on a night show they ever had, and they attribute that to having the night show. A lot of people staid over to the night show, of course they didn't get the second admission, but it drew the people and I think it showed in their receipts.

Mr. Young: I can say the first year the president took hold of our fair in 1919 we paid off the mortgage on our fair that had been there for years. When we got clean the next year we put on a night show and increased the prizes and premiums and I want to say so far as we are concerned I think the night show has helped us to get where we are and has been a winner greater than anything else, because our attendance both day and night has increased every year and this year was the best one we ever had and we made plenty of money. We are a little differently organized from any of the other fairs in the state. In our fair every man can be a stockholder that wants to. All he has to do is to buy a family ticket or membership ticket for $3.50. We go just as far as any fair in the state of Iowa, big or little, because $3.50 admits a man and all his family under twenty-one years of age, day and night, and his vehicle. It has taken some time to get them to understand that proposition. He can walk out on this ground and say, "Boys, I own just as much of this as anybody else, got just as much to say about the management of this, my vote is as big as anybody else."

We sell fifteen to eighteen hundred of these tickets, and every fellow in the county is a booster. When you consider the population of the county, less than 12,500, we believe we have the best county fair in the state of Iowa because we have less people.

Mr. C. E. Cameron: This is a question I am very much interested in for I think every county fair in the state needs something of this kind to help them along with their finances. In putting on a night show it has been an important question to decide what you are going to do with the people who pay admission at the outside gate in the day time and stay on the ground for the evening show. I have no doubt but that you have all been up against that proposition of how you were going to handle that matter. I remember when we first started the night show at Alta—of course that is a baby show up there, but I think a great deal of it (it is where I got my start)—some of our board of directors objected to having a canvas up around our night show. The upshot of the business was we didn't take enough money in to pay for the night show for the reason that people would run their automobiles up along the fence. Everybody would take in the night show and not pay a cent. We finally went to work and made arrangements with the fireworks people to furnish us a canvas to enclose in the whole night show.

I am a great believer in the night show for this reason; this is the age of automobiles; young people think nothing of driving twenty or twenty-five miles to the night show. They can't come in the day time but they can go at night, and that is where I think more profit on the county fairs comes in. It does not cost very much. I heard Mr. Clark say his night show cost $4,500 and took in $4,300 and he said that paid for all his amusements, and Mr. Price from Waverly says that increased the concessions. I know at our fair it increased our concessions almost double by that night show. Another thing, these young people like to go at night, like to go where it is all lit up.

Take the concessions. Our concessions men run to twelve o'clock at night, do an immense business. I think this is one of the most important propositions that the county fairs can take up. We all know fairs are getting more expensive. We know the stock interests want more money in the stock department. We are increasing premiums in the stock department that do not add anything to the outside gate. You don't charge them anything more for entrance as a rule, but it takes that much more money. I will venture to say stock premiums for the last five or six years have almost doubled. Where is this revenue going to come from to pay these extra stock premiums unless you have something that brings the people in at the gate to pay this? I tell you, gentlemen, this night show proposition, if properly handled, is one of the greatest propositions the county fair can have.

President Estel: Gentlemen, I think this subject has been quite thoroughly covered. It seems the overwhelming opinion of those present is that a night show is very profitable to all fairs. The Secretary will read the next question.

Secretary Wilkinson: The next question is, "Are there any fairs who make an attempt at collecting for the night show from those who remain on the grounds after the afternoon performance? If so, in what manner?"

Mr. Mullen: I tried it once, that was enough.

Mr. Clark, of Grundy Center: At our fair this year we tried something new, after a good deal of discussion. We canvassed-in our night show and charged no admission at the front gate and charged thirty-five cents for admission to the amphitheatre and also seated our track, and I will venture to say we had more people on the grounds at night than we did in the day time, and we filled every available space that we had to seat people. Our concession people were much pleased, and there was hardly one of them on the ground but what wanted to sign up for next year. The night fair had not been a success for us until this year. While we didn't make any great amount of money on it after deducting our expenses, lights and various things, we were only perhaps a little over a hundred dollars out on the night show, we established the fact a night show could be made to pay.

President Estel: Is there a fair secretary present that remains alive who ever collected or is collecting from those on the ground a second time? The question is sufficiently answered. We will have the next question.

Secretary Wilkinson: The next question is, "Should a fair include a demand that all cattle should have received a sixty or ninety days retest for tuberculosis, or at least a thirty days test? Will any violations of this matter in any way influence state aid?"

Mr. Barber: Read the state law, that answers it.

President Estel: I think that answers it fully. The state law covers that. A ruling made by the Annual Health Commission requires every one to demand tuberculin test charts from cattle brought onto fair grounds in Iowa.

A Member: Don't you think, in a way, it would be well to have the law amended so that it would save trouble?

President Estel: There might be discussion on that.

A Member: Three different times this year I and my board had trouble over that.

Mr. A. R. Corey: I believe the state law gives the Animal Health Commission power to make these rules and enforce them the same as a law. It is my understanding that there is a penalty for any fair or exhibitor who exhibits stock at any of these fairs without the test. They must be from an accredited herd or must have been tested a certain period before the fair. The Animal Health Commission has full authority to enforce this rule without any additional law. The only thing that will affect your state aid is if you permit gambling. Whether or not you permit other than accredited herds to exhibit does not affect your state aid.

Mr. Williams: That question came up before our fair several times this year and we put it up before the veterinaries in the town and also went to an attorney and he stated that was merely a rule and could not be enforced, and it kind of passed the buck over to us and we were up against it and if we turned the man down on entering his cattle there would be hard feelings. Now could there be any way arranged whereby we could all get specific instructions on that, so we could pass the buck on to somebody else rather than the local party.

Mr. Bacon: I think you get your rule right from the state veterinarian, he will send it to you if you write him for information. Simply make your state veterinarian responsible and not your fair if you have any question.

Mr. Young: There is a proposition that comes in on that on the other side of the question. It is generally supposed in both hogs and cattle, if I have cattle that are immune and have hogs that are immune, I am supposed to be perfectly safe, while if the other fellow brings stuff there without it he is the man that is liable to get bumped, and I can't see any good reason for me worrying. We had the same proposition down there with us this year and we stood pat for a long time, but we didn't want any mixup or any trouble, and I want to tell you I don't see any merit to it at all. If I have got a herd of cattle that are immune and have got a herd of hogs that are immune and you haven't, I am supposed to be perfectly safe, and if you are fool enough to bring yours there and take chances on it that is up to you. I don't see any good grounds for it at all as far as that is concerned.

Mr. Harvey: We had this same trouble up in our county and we didn't have any idea as to what the law was, I didn't, and I don't think any other member of the board did. But, however, we wanted to find out if it was incumbent upon the fair board to see that this law is enforced there, if it is, it is our duty to do it; or in other words whether an outside party other than a member of the board can file complaint that this man's hogs have not been immune just as well as a member of the fair board. I want to know exactly the ruling in that kind of a case. Whether it is incumbent upon members of the board to see that it is done or whether it is the privilege of the gentlemen exhibiting stock there to demand that that be done. It puts the burden upon the association and angers a good many of our exhibitors. They say why do you put the cost on me of $25, $30 or $40, whatever it costs them, when others don't do it. If incumbent on the fair board to do it I say let's do it, if not let's abandon it.

Mr. Barber: I think you are mistaken if you think the Animal Health Commission or the veterinarian cannot make a rule and enforce it and punish you when you don't enforce it. They have the power to make these rules and the power to make a penalty. I had it up a year ago with a group of county agents at Mason City, and I think our county agent will bear me out, that they can make a rule and can enforce it and can make you enforce it, you are the one responsible and not the exhibitor. We have good men refuse to show cattle unless you have your herds tuberculin tested and have your barns properly disinfected, they wont come at all.

Mr. Moore: I would like to hear from Mr. Corey. He ought to know what the law is and what the penalty is.

Mr. Corey: I am sorry Dr. Malcolm is not here. The way I understand the law is the Animal Health Commission has authority under the law to make these rules, but they first must be approved by the Executive Council, and each one of these rules here were approved by the

Executive Council. I am positive the law gives the commission authority to make these rules and enforce them and also provides a penalty, but I cannot tell you just what the penalty is or on whom it falls, whether on the fair management or the exhibitor. I think if you recall when the rule came out for the immunizing of hogs. At first it did cause the fairs trouble, but the exhibitors discovered it was a good thing and in a few years all of them immunized their hogs before they took them to the fair. I think the rule on the tuberculin test for cattle is going to work out the same way. I know at state fairs where they did not require the tuberculin test for cattle they could not get a creditable exhibit of dairy cattle. We had that experience at the state fair and we lost a good many herds because we did not require the tuberculin test for dairy cattle. We had required the test for beef cattle for two or three years. Last year we enforced this rule of the animal health commission and required everything to be tested and our dairy cattle exhibit increased fifty per cent.

Mr. Moore: I would suggest we ask Mr. Corey to get in touch with Dr. Malcolm and find out about the penalty and report here this afternoon.

Mr. Cameron: Let me suggest that we get Dr. Malcolm to come here himself this afternoon.

President Estel: I will appoint Mr. Corey to have Dr. Malcolm here if possible this afternoon. Let us have the next question please.

Secretary Wilkinson: "Would it be possible for two or more fairs having the same date to pool their attractions, thus securing for each a change of attractions not otherwise possible for any single fair to contract alone?"

President Estel: I think this has been up before and it seems impossible. Is there anyone in the room who has successfully done this who can tell about it? If no one can I think that answers the question, that it is rather difficult to accomplish.

Mr. Curtin: We did that one time at Decorah with Independence. We traded acts back and forth between Independence and Decorah, it is only sixty miles, but it didn't amount to anything for the work entailed and we never tried it again. It made a lot of trouble and the crowd didn't seem to care much for the difference and we let it go at that.

President Estel: What is the next question?

Secretary Wilkinson: "Don't you think it would pay the Iowa fairs not located near cities to cut out the night fair?"

(A chorus of "Nos").

Secretary Wilkinson: "Can the Iowa Fair Managers Association arrange for a uniform scale of premiums in various departments; also uniform admission charges to fairs?"

President Estel: Is there anyone who cares to discuss that matter?

Mr. Moore: The most important work the International Association of Fairs and Expositions has done or tried to do in the last two years is to provide a uniform classification for cattle, horses, hogs and sheep, and a maximum and minimum amount of premiums to be offered and the way it should be divided into the different moneys and send it out and then let each fair take advantage of that classification and money offers and adopt it to their own conditions. We are working on that now and expect during the coming year to have a meeting with all breed associations of horses, cattle, sheep and hogs and adopt a uniform classification, and also maximum and minimum money offered divided equitably between first, second, third and fourth, and as far as you want to go. We are going to try to do that and have got the cattle proposition pretty well in hand at this time.

President Estel: Is there anyone who has anything to offer on the uniform admission? Let's see the hands of those in this room who charge a half dollar admission during the day. Let's see the hands of all those who charge twenty-five cents for children under fourteen years of age. Let's see the hands of those who charge thirty-five cents after five o'clock, general gate admission. Six. Let's see those who charge twenty-five cents general admission at the gate after five o'clock in the afternoon. Pretty near unanimous. Let's see the hands of those who charge fifty cents admission or more to a general seat in the grand stand in the afternoon. Nine. That covers the subject thoroughly, so there is no need of asking any more. Does anyone else care to say anything in regard to this subject? The next question.

Secretary Wilkinson: "What is the best method of dealing with persons who wish to leave the fairgrounds and return the same day while the fair is in session?"

Mr. Bacon: I think most of the fairs do not give pass-outs, I know we don't at Davenport, but Spencer, Iowa, Mr. Emery's fair, I think they have one of the best systems in the way of handling pass outs. They have an ordinary stamp that the gatekeeper has, with the name of the fair and the date, all in a circle, and if anyone desires to go out they are stamped on the wrist and they must come back and show the stamp, if they can't they have got to pay their way in.

Mr. Gildner: We tried the system of putting the name and date with a rubber stamp on the wrist and it gave good satisfaction.

Mr. Clark: We figured out a pass-out check we used last year very successfully. This one reads as follows: "Tuesday, Sept. 12, 1922." We use a different colored return check out every day. "This return pass issued to." If Mr. Curtin comes up there and wants to go out we have him sign his name there, and he takes it. "And will be honored at the pass gate only. Signed in the presence of the gatekeeper." When Mr. Curtin comes back he signs his name on the second line and goes in; otherwise he stays out. If the signature shows any attempt at a forgery that means he has got to pay his way in. We had this plan in operation this last fall and it worked very nicely. Even the concession men highly approved it.

Mr. Price: Did that include the night show too?

Mr. Clark: We didn't give out any after five o'clock in the afternoon but did give a man and woman a chance to go home at five o'clock if they wanted to, any time before that, and come back at the evening show instead of staying there.

Secretary Wilkinson: The next question is, "I would like to know if any other secretary has held such position longer than fifteen years?"

President Estel: How many of this audience have been fair secretaries more than fifteen years? Three. I think it would be perfectly fitting that the three gentlemen who have held such office more than fifteen years to have their pictures taken and do a little advertising for the Fair Secretaries Association in Iowa. Next question.

Secretary Wilkinson: "How many fairs receive the amount of $1,000 county aid? How many receive a less amount? How many fairs receive no county aid? How many fairs have been refused county aid by the Board of Supervisors?"

President Estel: First, how many in Iowa received $1,000 from the county in which their fair is located? Let's see the hands. For either the past year or present year?

Mr. Harvey: In Crawford county we received a thousand dollars two years ago. Last year we received $700.

Mr. Moore: On page 24 of Mr. Corey's report you have it shows every county fair that has received county aid.

President Estel: We will now adjourn until this afternoon.

TWO O'CLOCK P. M., TUESDAY, DECEMBER 12, 1922.

President Estel: Mr. Corey has arranged for Dr. Peter Malcolm, our State Veterinarian, to speak to us a few moments in regard to the tuberculin test requirements and cholera immune requirements for fairs.

Dr. Malcolm: Mr. Chairman and Gentlemen—There seems to be some misunderstanding or some complaint about the tuberculin testing of cattle for exhibition purposes. Two years ago we put this in force with the idea of protecting the exhibitor against tuberculosis, because we found cattle that were exhibited at fairs that did not have tuberculosis and when brought back home and put into accredited herds a great many reacted. Therefore it stood my department in hand to see if we could not formulate some protection to the exhibitor. This we did. We made it with the state fair and with the county fairs, for the simple reason that if it was a good thing for the state fair it was certainly a good thing for the county fairs, because the county fairs help make up the state fair and vice versa.

Now the question arises as to whether this can be put into effect and if there is any protection to you secretaries in enforcing this. You can enforce this rule. We enforce it at the state fair and have no trouble. To illustrate, the first year we put it in operation at the state fair just three animals came there without a certificate. Two of them were baby beef, and a nurse cow. So we tested these three animals and they passed the tuberculin test and we let them remain on the ground. Last year there wasn't an animal exhibited at the state fair but had its health certificate with it, and only one offered to exhibit without one. So we built up our state fair and I believe it will build up your county fairs, because the exhibitor and breeder is wide-awake to the fact that the mere fact of having tuberculosis in his herd is detrimental to him, and we must give him that protection.

Now as to the penalty. This rule was adopted by the Commission of Animal Health, approved by the Executive Council of the State of Iowa, consequently it becomes a law of the State of Iowa. In Section 19, Chapter 287, Acts of the 38th General Assembly, or in the Compiled Code Section 175, reads as follows: "Penalty. Any person or persons violating any of the provisions of this act or any of the rules and regulations adopted under the authority of this act, except as otherwise stated, shall be guilty of a misdemeanor and shall be punished by a fine of not less than $100 or not more than $500 or by imprisonment in the county jail for not less than thirty days, nor more than six months." Now you naturally say, "who is this penalty to be attached to?" Every party interested in it, the exhibitor as well as the secretary. Any of these parties who violate this is responsible for the penalty, it makes no difference whether it be the exhibitor or the secretary, or board of directors.

Now the method by which you can handle it is very easy. When a man makes an entry for exhibition see that he follows that with a health certificate, and then if your exhibitor should exhibit animals there that were not on this test then he is liable.

The wording of the ruling is that all animals exhibited at any of the fairs shall have a health certificate. The ruling on the hogs is that each one must be immuned. The ruling on your tuberculosis is very plain and was amended last year. The first rule put into effect you know about the accredited herd system of the State of Iowa, but up to last year we didn't have very many fully accredited herds. We had up to the first of July 779 herds and at the present time over 1100 herds fully accredited. That rule was amended last year to take care of herds that had passed a clean test, so that any herd that has passed a clean test has a right now under this ruling to exhibit at any fair for one year. That ruling is applied to accredited herds. In testing out a herd of cattle if you gentlemen have one that has passed a clean test you are not due for another test until one year from date. Therefore it would be a hardship to make this man who has had a clean test record, to require a ninety day retest before exhibiting at the fair, so we amended the rule and it now requires all cattle presented for exhibition or other purposes at the Iowa State fair or any fair or exhibition in the state of Iowa shall be from a tuberculosis free accredited herd or from a herd which has passed one clean test within one year under the plan for the accrediting of herds; and show cattle other than those above specified shall have passed a satisfactory tuberculin test and found to be free from tuberculosis not more than ninety days prior to the date of the exhibition at such fair. That is the rule as it stands now on the cattle.

The rule on hogs is all swine exhibited at state, county or other fairs or exhibitions in the State of Iowa must be accompanied by a certificate showing that they have been immunized with anti-cholera serum and virus not less than thirty days; when serum alone is used not more than fifteen days prior to the date of said fair or exhibition. These rules and regulations have all been submitted to the Executive Council and approved by them and they have become law.

A Member: What are the rules as regards disinfecting buildings and grounds?

Dr. Malcolm: We have a rule there that includes your county as well as the state, that they should be thoroughly disinfected.

A Member: I would like to ask the doctor in case in a county where there is no cholera would you consider it a hardship to compel them to use the double treatment on a herd of hogs if they are going to exhibit

Dr. Malcolm: You have reference to hogs on exhibit. You will notice in that rule we do not require you to immunize hogs and use virus. We allow you to use serum for your own protection, not for the protection of anybody else, because we are fearful that when you get into a show, some individual or hog may have carried the germ of hog cholera into that ground, and if the hog had taken serum you have it protected against that organism.

A Member: The tuberculin and cholera rules should be printed right in the premium list.

President Estel: I would suggest that it might possibly be a good plan to print these rules and regulations in every premium list. Do you want to take any action in regard to that?

A Member: I so move.

President Estel: It has been moved that it be the sense of this meeting that every premium list issued by a fair in Iowa print the rules and regulations as prepared by the Animal Health Commission. Is there a second to the motion?

Several members seconded the motion and it was carried.

The next subject that will be discussed is "Concessions and How to Handle Them." This discussion will be led by Mr. L. W. Emery, of Spencer.

Mr. Emery: I had a paper on this but since I came down here I found a man who had a much better paper and was much more competent to handle it, and I am going to turn this matter over to Mr. M. E. Bacon for discussion.

Mr. Bacon: Under this head there are the "straight, legitimate concession" and the "grafting concession."

Definition of the word "Concession" is as follows: 1st, act of conceding or yielding; admission. 2d, a thing yielded; acknowledgment; admission, grant.

According to the State Laws of the State of Iowa, all concessions must conform to the art of skill and science.

Definition of the word "skill": Understanding, judgment, argument, proof, also reason, motive. 2d, Knowledge of, and expertness in, execution of performance, practical ability in art, science, etc., expertness, aptitude.

Definition of the word "science": Knowledge as of principles or facts. 2d, Accumulated and accepted knowledge systematized and formulated with reference to the discovery of general truths or the operation of general laws; classified knowledge. 3d, Such knowledge relating to the physical world; called also natural science. 4th, Any branch or department of systematized knowledge. Science, art. Science is systematized knowledge considered in reference to the discovery or understanding of truth; art is knowledge as applied and made efficient by skill. If then, a body of laws and principles as of rhetoric, is exhibited in an ordered and inter-related system they appear in the character of a science. If they are supplied in actual use as to the construction of discourse they become or furnish the working rules, of an art. For example, any game which takes the art of throwing, shooting or working out puzzle with hands or mind come under the head of art, skill, and science.

The following concessions come under this head: Shooting Galleries, Baby Doll Racks, Cane Racks, Knife Racks, Huckle-de-buck. The Keg Game, Swinging Ball, Spot the Spot, and Large Cat Game, but in every instance the above games can be made crooked so that the most skilled could not win on the same. For instance, in the cat rack and knife rack, when the concessionaire gives a demonstration of throwing the wooden rings over the cane or knife, whichever the case might be, he uses a large open ring, and the same can be changed to a small ring with which the player could not possibly ring the cane or knife in question. In the case of the ordinary old style baby doll rack, concessionaire may lock the rack so that it would be impossible for the player to knock any of the cats over. The swinging ball on which they use a large or small bowling ball and a large ten pin, is one of the worst games which has ever been permitted, and the player has no chance of winning.

In giving a demonstration of the Swinging Ball the concessionaire in order to show how the ten pin can be knocked over with the swinging ball places the ten pin either to the right or left of the center and knocks the ten pin over every time. When the player attempts to play the game the concessionaire places the ten pin in the center and the ten pin cannot be knocked over.

In the case of the game, for example, Huckle-de-buck in which the balls must be thrown in a keg or pail, it is very easy for the concessionaire in demonstrating to use a small ball which would not have any interference in alighting in the keg or pail, but he also, if he so desires, can switch the balls, giving the player a larger ball than he used when making the demonstration. The large cat is used as a ball game, in which the player is given three or four balls to throw. The cat can be fixed in a lock so that no matter how hard the player hits the cat it could not be knocked over. The game of Spot the Spot using a number of tin circles, is absolutely a "skin-game" and the player has no chance of accomplishing the feat of completely covering the spot with the tin circles, which were furnished him by the concessionaire. Another game that is absolutely a crooked one is a "roll-down" or "add-a-ball." In many instances the player is really the winner, but the concessionaire outcounts the winner in adding up the numbers. The same thing happens when they use the Arrow Dot, shooting the arrow at a board background containing a number of numbers and adding up the same, the concessionaire, if he wants to be crooked, can outcount the player.

A good many states permit the operation of wheels, such as the doll wheel, candy wheel, blanket wheel, etc. In my opinion, a wheel termed a "merchandise wheel" is one that should be permitted to operate at fairs. By a "merchandise wheel" I mean a straight up and down wheel on which a number of paddles are sold to the players, each paddle containing at least five numbers and before the wheel is turned the concessionaire must sell all his paddles. When the wheel is turned someone of the players is bound to win the prize. I am against what they call an "intermediate prize." For example, a wheel operating on which there is a large doll in which small and large dolls are given as prizes, and if the wheel stops on the star then the player wins the large doll; if not, the player wins the small doll. This should not be permitted, and the concessionaire should operate with only one big prize. I have known where blanket wheels have been operated on which there were 125 numbers on the wheel, 25 paddles were sold, each containing five numbers and before the wheel was turned, all paddles were sold and some holder of one of the paddles would win the blanket.

A good many fairs have not strictly lived up to the law and sold their concessions under the law which must confirm to the art of skill and science. I do not mean any individual or set of fairs, or I do not mean by this statement fairs in Iowa alone. The past season I attended fairs in Nebraska, Illinois, Oklahoma, and Texas, and had the opportunity of observing what is going on.

Something must be done so that the fairs can sell their space for the fair. For example at Davenport where I am secretary, I have tried to live up to the law of Iowa and sold my concession space according to the law, and have stated in all correspondence to all concessionaires that their concession must conform to the art of skill and science. I must admit that I sold some space for swinging balls that after the first day found out that the player had no chance of winning, absolutely closed the same and would not permit their operating thereafter.

I think that fairs have been a little lax in letting some kinds of concessionaires operate. Some fairs did not live strictly up to the law of skill and science and sold their space and received the income from the same and as far as I can observe, got by just as well as those who tried to keep within the law.

Another thing that I think should not be permitted at fairs, at 49 camps—a type of dancing show. You might ask the question: "What is meant by a 49 camp?" In answer to this, I would say that it is an outfit in which the traveling women dance with the town's people on a portable floor, charging a fee from the town's men for the dance.

A marble roll-down is what is termed as a gambling device. It is started by a person who has had the operation of same that a person playing only has one chance in 200 of winning the main prize. There are many straight concessions that may be "gaffed."

A tip-up is a board with cleats on each side and ends, the flat surface is full of jigs or nails. At the bottom of the board between each nail are numbers either from one to eight or six or eight. Marbles are rolled down from the top and the score denotes a prize. Red, a big one, black small. They are hardly ever counted up right by the operator except for the "capper." Besides the red numbers are very hard to get. It is called a "skin game" or "thieving store" by many and not allowed to run in many places.

Most of the Huckle-de-buck joints have a loose bottom which when loose, balls will stay in, and when tight will bound out. It is a very ingenious thing and is under the control of the operator all the time. It is comparatively a new game and has fooled thousands of people and made thousands of dollars and given the people nearly nothing. It is not a "chance game" for you have no chance to get anything unless they let you. Some of the dolls they carry are at least two years old.

A set spindle sometimes called a "camel back" is under the control of the operator all the time and is a very cunning device used to fool both young and old. When you lose a dollar or more they lay down as much more, sometimes double; they tell you when you get the right number you get your own money back and twice as much. When you drop out they let a "capper" win the pot. There are many other games as bad as this one but time forbids me going into them. The old fashioned paddle wheel was a game of chance but was run on the level. Why more papers do not expose the methods of these games that rob the boys is past understanding. I repeat that the merchandise wheels can be saved at this eleventh hour, but the legitimate wheel operators and the concessioner will have to hurry and try to assist in the clean up of the crooked concession.

If it takes a game of chance to make a gambling device, well, there are many of them operated in such a manner that the player has no earthly chance so I fail to see how the operator of such a device could be fined for running a game of chance. While many fair officials are opposed personally to concessions, they should not lose sight of the fact that many thousands of people come to their fair from year to year to be entertained and it does not seem exactly right that they should be denied that which they enjoy and are only offered the chance of seeing once a year. Two-thirds of the people who attend state and county fairs are persons who live in the rural district. The fair should not eliminate the legitimate concession.

A gentleman was fined at Little Rock, Arkansas, charged with operating a gambling device. Was fined $25.00 and costs and his gambling device was ordered destroyed by the judge. The guilty concessionaire said that a person had one chance in two hundred in winning a main prize. A grifter is a robber in disguise, there are no two ways about it. Grift is not a habit, it is a curable disease; be your own doctor.

There are many usually straight concessions that can be gaffed. The old time "Huckle-de-buck is merely skill on the part of the player to put the balls into the kegs. At the same time all bucket games may be gaffed joints.

Fair merchandise wheels do not come under the panning as to grift. A reasonable way to sum that up is, even though every player who spends a dime does not win from 50c to $1.00's worth each turn, one of them does, if the paddles are all out, and as for the others about 95 per cent of them would say that he had his dime's worth of excitement, and real enjoyment in the competition. How about betting on the big baseball games, racing, politics, etc.?

The clean-up campaign regarding concessions is against the "no chance games," and there are many of them at which the player has absolutely no chance whatever. Merchandise concessions, at which the merchandise is actually put out and without buy-backs, (which, in reality, makes them percentage joints) are not grift joints, as each player has his dime's worth of fun, and he with his home town friends (no "cappers") gain the coveted prizes for which each gladly takes a chance.

I suggest that Church Fairs, Bazaars, Block Dances, Home-coming Expositions, etc., be included so as to make it a general clean up, for there is much rottenness in closed cities allowed by the Powers that Be.

It is always possible to tell by the newness of the merchandise behind a store if the "joint" is legitimate or otherwise. If the stock is shopworn it's a cinch it's a strong line-up store. If it is clean and bright and there is plenty of it on display it is certain (almost) that the store is legitimate and the operator is giving the public a run for its money.

Sure you know the difference between a percentage and so-called flat joint. As information when a few packages of cigarets, a few dolls or a very limited amount of other merchandise is on display, but the games are run always completely "buy-back" they are camouflaged percentage in principle.

Recently a farm journal claiming to be of the highest class and enjoying a wide circulation published certain articles written by a self confessed ex-faker which had its effect on some readers of this journal leading them to believe that a large percentage of fairs consist chiefly of an array of fakers presided over by arch fakers. In fact, a picture presented in one of these articles showed an exhibit building empty while space devoted to fakes and fakers was completely occupied. Of course, much of the so-called information presented in these articles does not apply to 90 per cent of fairs today.

The effect of these articles on many fair men, however, has been to lead us to wonder whether some of the people who do not attend fairs credit fairs with being a conglomeration of fakes or really worthwhile educational institutions.

The millions of people who each year attend fairs know what fairs really are but how about those who have never attended a fair and who may be patrons at a fair next year? The reaction of this series of articles on me has been that the Iowa Fair Managers' Association of which all the fairs of Iowa are members and all organizations of fairs perhaps should maintain a bureau to watch over misleading, unjust criticism of fairs or statement concerning fairs which, by inference are harmful, at the same time accepting in the right spirit just criticism. There are people not familiar with fair work who do not fully comprehend either what fairs are trying to accomplish or what their clientage is.

Fairs have been the pioneers in demanding clean shows and concessions. During recent years some municipalities have been offended in street fairs but they, too, are cleaning up, until the day of the faker is becoming a thing of the past.

Now, I started out to say that it is about time that we fair fellows took decided steps against misleading statements concerning our fairs. Fairs have been "kicked about" long enough.

The up-to-date fair returns more for the money invested to get into and in admission fees charged after the outer gates are passed than any other gathering appealing to public patronage. People are as safe on ninety per cent of the fair grounds in America as they are at their own homes, physically and morally. Where in so short a time could one learn so much of a particular community, county, district or state as at fairs of this section. The modern fair next to the common schools is America's greatest educational agency because they are public service projects. They are ready targets for the bow shooting poisoned arrows.

Most agricultural journals have, from time to time, called attention to the excellent educational work of the fairs. Let's have more of this. Fair men have been after fakers for years. Does it help us to get them to "boot us" and thereby mislead the public as we still pursue the faker?

There are over 3,000 fairs and expositions and allied shows in America managed and conducted by perhaps 100,000 men and women and attended by fifty million people each year who find them more than worth while. Looks like we are strong enough to sit up and take notice when unjustly attacked. What are we going to do about it?

Yes, fellow fair secretaries, concessions are attractions and if the proper kind are furnished there is no end of welcome entertainment.

In the common use of the terms there is a vast difference in "graft" and "grift." There is a certain amount of graft in almost every branch of business. "Grift" is common robbery.

Fair secretaries deserve praise for their progressive efforts and especially toward having favor-gaining attractions including concessions from which the fairs gain a good revenue. But when they or their concession managers discriminate against fair deal concessions there is less cause for praise. If any person is too busy to be courteous and just, he badly needs a well-informed assistant or substitute.

For a square deal, even chance of deciding which one of several individuals should be the fortunate one in drawing a prize there doubtless is no better way than to give several revolutions of an evenly balanced wheel providing it turns after the starting and stops at its own momentum, otherwise, of course, the wheel and the transaction are crooked. They don't care about investigating persons who have this year especially ignorantly made such a cry about wheels and those who would not allow straight merchandise wheels to operate only to sanction (unless the operator wishes it) as swinging balls, gimicked tip-ups, gaffed buckets, some of the roll downs, most picouts, etc. Numerous cases of this nature have been reported this fall and many of them on fair grounds. Just a little study of the "joints" would give the concessioner the information he needs if he really wants to come clean himself.

On a great many fair grounds you might see a spindle and also a swinging ball. Personally, I consider a swinging ball game in the same class as the shells and the general public looks on a spindle in the same light. In order to clean up I would suggest that the church fairs, bazaars, block dances, home-comings, expositions, etc., be included so as to make it a general clean up for there is much rottenness in closed cities allowed by the "powers that be." Merchandise wheels work in the states of Pennsylvania, Virginia, West Virginia and Illinois and up in all other states where officials exercise common sense it is predicted that more states will permit them during 1922. Yes, the tide has turned. Graft must go.

All the ball games are not what they appear to be in print. In a game in which the player actually throws baseball at objects, 90 per cent of the results are governed by his straight throwing ability, but when little balls are tossed into the mouth of a prop clown head, a swinging ball, etc., with several sticks (cappers) lined up in front to put confidence in the unwary, into being termed the baseball game, is not what it seems.

Using the following as an example, because a horse kicks over the traces does not necessarily mean that he is a bad horse. He probably has horse sense, and because some fair secretary permits wheel and other games of chance to operate does not necessarily mean he is a bad secretary. He probably used very good horse sense.

Mr. Young: One game that was out last year that was a new one to us, I would like to know about, there was some question about it, that is this Bingo or Corn Game. They did a flourishing business. If the fair secretaries could compel them to get permission from the Attorney General's office it would protect us.

President Estel: The subject of concessions is one in which we are all interested. It is a subject I know we could talk on all afternoon. We have quite a program, and Mr. Bacon who has given a very good paper on this subject, has suggested that some kind of a committee be composed of the fair secretaries to investigate this matter and to make recommendations. We, I don't believe, as a body here, will ever get very far in saying just what should be done and what should not be done. The Attorney General of Iowa is not here. As far as I know there has been some question as to what is a game of skill and science and so it would seem to me proper to have some committee composed from this organization to look into this matter and confer with the Attorney General and then authorize that committee to send out their information to the fair secretaries of Iowa.

Mr. Bartle: I move that the president and secretary and three others of the association act as such a committee.

President Estel: It has been moved and seconded that a committee of five be instructed to investigate this matter and confer with the Attorney General and send their information to the fair secretaries of the state. Are there any remarks? All in favor of the motion signify by saying aye. Contrary no. It is carried.

The next subject is "Problems in conducting harness races" by Mr. E. J. Curtin of Decorah.

Mr. Curtin: You nearly all will agree that we have to have harness horse racing as part of our attractions at the fair. While our fairs are strictly educational, however, in the state of Iowa, at the same time it has been demonstrated by experience that we can't depend on the educational part entirely in order to get very many people to come to our fairs. So we have adopted the scheme in Iowa in most of the fairs to give them amusements enough to bring them in, so that when they get a little tired and want a place to sit down and rest after seeing the educational exhibit we entertain them with our different amusements. As fair men I think we will have to consider harness horse racing as an amusement for our patrons. There are about ninety-two fairs in the state I believe and I think about eighty out of the ninety-two give harness races.

You must be very careful in putting on a harness race program that you don't overdo it. If you are a harness horse enthusiast you are a little apt to make that the main part of your program. If you are not a harness horse enthusiast and don't believe in such things you are very apt to give such a minor place on your program to it that it don't get you anywhere. About the only thing you must guard against is to see that you get a happy medium as between harness racing and other amusements for your fair.

The way to get a good harness race program is in the first place to have somebody in charge of that part of your program that knows the business. The average fair secretary, and I don't say it with any sense of disparagement, knows practically nothing about harness horse racing.

You will appreciate undoubtedly that there are few men who are just the right men. You should arrange for somebody to take that end of it off your shoulders if you are not competent to do it yourself. If you are, you will start in and decide first how much you want to give and about what purses and classes will be suitable for the horses you expect are in your immediate vicinity or will be at the time of your races. It is much preferable for three or four fairs to combine in a circuit as it makes advertising cheaper and they are apt to get more horses by reason of having four or five weeks of races continuously without making long, hard shifts. The next thing is to acquaint the people that have horses with the fact that you are going to give a meet and when you are going to give it and what the classes are. The old way of doing that used to be to order a lot of entry blanks printed and then go and get a list of horsemen's addresses and mail out all these entry blanks all over the country to them. That is now obsolete. There are turf papers published that the horsemen take. About six or eight weeks before your meet make out a program and send to the horse papers and run it continuously for six or eight weeks. The average fair is not before the second week in August and it is not after the second week in September; they all come in about four weeks. Fairs that come the 15th of August really should start advertising the middle of June or possibly the first of June in the horse papers.

You don't need a big whole page of the papers but get enough to let the horsemen know you are going to have a meet at your town at the county fair and you would like to have them there. You can dispense with sending out any blanks by mail. Of course, you want some entry blanks, but the average man who wants to enter, he knows how to enter, he knows from the newspaper, and will write a letter with the entry in. Then be sure to give the publication six or eight weeks in advance what your entries and classes are so the horseman if he starts out in the spring before he starts sort of likes to know where he is going to race that summer and fall. He gets that from the newspaper. Your entry blank may never reach him. If he can fix a circuit for himself before he leaves home he is more likely to be with you. He is down with you and he has his route.

When he comes over to your place you should have a man in charge that has an acquaintance with these people more or less, the more the better. The average county fair secretary is so engrossed with other things that he does not know just what little attentions or whatever you may call it, they appreciate. When they come in at night they like to have the stalls in order for them; don't like to have to clean a lot of rubbish out of the stalls to get the horses in. They like to come in and find the roof repaired before the fair is opened and like to have an opportunity to buy hay, straw and feed on the ground, they like to have you arrange for that for them. They don't like to have you sell off the privilege so they can be "gipped" on it in order to let the feed man get his money back. It should be sold to them at cost because they are part of the show.

Then you have to take an interest in the races. How can you do that? You hear people say the races are made up in the barn, they are not good fun any more. The secretary that says that exposes his ignorance; he doesn't know his business. They are not made up in the barn unless you ignore the horse races and allow them to do it. I have given races I suppose for twenty-five years and in all my experience in my town I don't believe there has been one race made up in the barn; if there has been it has not been able to be pulled off according to schedule because we have stopped it. That is because there has always been an expert there who knows what is going on. If you haven't a man that knows what is going on you are liable to have some trouble.

It is a harder plan to make up what you call specials. You say you have to do it. I don't believe you have to do it if you advertise long enough ahead and make your circuit so compact that the horsemen will travel from one town to another. You don't have to give a whole lot of money. They want to get what is termed added money. You can't give races in Iowa unless you do give added money. They want to be paid the same as you pay your vaudeville or anybody else, and you are doing that when you give added money. I think if you do this your troubles will be entirely eliminated. Get a man who knows how, turn it over to him, then make them perform their part of the contract through him.

But don't make it one sided, thinking the horse races are the whole fair, because they are only a part of the fair, but they are an outstanding feature as an amusement.

President Estel: I understand Mr. Smollinger, Secretary of the American Trotting Association, is here today, and we would be very pleased to hear a few words from Mr. Smollinger.

Mr. W. H. Smollinger: It is not necessary for me to tell you how popular harness racing is when it is properly conducted, nor is it necessary for me to tell you there are more harness races conducted on the fair grounds of the United States than there are at what is known as race meetings.

The harness horse and the fairs have grown up together. Originally, a great many years ago, perhaps farther back than many of us can remember, the fairs had no harness racing. A number of manufacturers of agricultural machinery were very anxious to get their products before the farmers at the fairs and especially what were then known as state fairs, but were very different from what they are today, so they bought harness horses and put on the races in order to attract the people to the fair grounds so they could show them their machinery, and from this beginning the harness horse and the fair have become inseparable. Harness racing is the one contest on your fair grounds where everybody can see who is the winner. In the judging of live stock and all other matters only those who are thoroughly initiated into that part of the fair can point out the reason why one animal has won over another.

The amount of money that you can afford to give for harness racing depends to a certain extent upon the money that harness racing can put in your treasury. Harness racing must be your principal attraction because you have spent your money in building a track and building an amphitheater from which you expect to derive a revenue. Those who give night shows now have the added revenue from the night show, but originally the amphitheater was built and the money expended to give harness races. The way you can overcrowd your amphitheater and make inroads on your treasury by having to build a larger one is to give harness races that are real races.

In the state of Iowa today most of the purses are for added money, which is a very good thing. There are some things about this added money proposition that sometimes work a hardship on the fair association. All the entrance fees that are supposed to be received by the secretary are supposed to be added to the purse. It so happens that secretaries do take entries that are not accompanied by the entrance fee, and possibly these horses do not start and consequently the secretary has a hard time to explain to his board of directors how it comes he paid out more than the amount of the purse itself and the amount received. To obviate this I would suggest you place this on your entry blanks and in your advertisements, that all entry and starting fees received be added to the purse. This gives you a little leeway.

You should do everything you can to encourage men to come to your track and races. You should give them clean stalls and show them every courtesy. On the other hand you should conduct your races absolutely and strictly in accordance with the rules. Don't let any man come in on your ground and because his race is scheduled for the last day get you to change the program and put the race on the first day so he can get through with his work and loaf the rest of the week. It is very easy for a good talker to get the secretary to do this. Don't do this. It makes endless trouble and is not a square deal for every other man on the ground and in the race. Stick to your program as far as possible. Whenever you deviate from the rules, if you are trying to be a good fellow, you are simply inviting trouble. The men that own harness horses are made up of the same kind of people that make up your bankers, your merchants and all your professional men. There are many men among them, as there are in all other classes of life, good sportsmen and some that are not good sportsmen. Don't confuse a real sportsman with a sport. A good sportsman is one who is a good loser, one who can see both sides, and there are not all men constituted so they can be good sportsmen. So whenever you deviate from the rules even to please these men you will get into trouble.

Of all things you do, don't suppress time. This talk that you can't get horses unless you suppress time is foolish. The horsemen need the fairs as much as the fairs need the horsemen. What we are interested in is having contests, not one horse leading the field and getting the money with the rest of them nowhere. If you are going to have good races you must give the actual time so that the horses will be properly classified. Don't listen to the man who tells you if his horse gets a certain record his value is injured. That is not true. Give them what they get, treat them courteously and require them to put on a good clean race.

President Estel: The Credential Committee will report at this time.

REPORT OF THE CREDENTIAL COMMITTEE

The following fairs have paid their dues and are entitled to vote:

Adair County Fair
Adams County Fair
Audubon County Fair
Allamakee County Fair
Dairy Cattle Congress
Boone County Fair
Bremer County Fair
Aurora Agricultural Fair
Buchanan County Fair
Buena Vista County Fair
Butler County Fair
Calhoun County Fair
Rockwell City Fair
Four Counties District Fair
Cass County Fair
Cedar County Fair
North Iowa Fair
Big Four Fair
Clay County Fair
Strawberry Point District Fair
De Witt Fair
Crawford County Fair
Community Fair and Stock Show
Tri-County Fair
Delaware County Fair
Burlington Tri-State Fair
Davis County Fair
Dubuque County Fair
Fayette County Fair
Greene County Fair
Grundy County Fair
Guthrie County Fair
Hamilton County Fair
Four County Agricultural Fair
Harding County Fair
Henry County Fair
Winfield Fair
Ida County Fair
Jackson County Fair
Jasper County Fair
Jefferson County Fair
Anamosa District Fair
What Cheer Fair and Exposition
Jones County Fair
Kossuth County Fair
Wapsie Valley Fair
Marion Inter-State Fair
Columbus Junction District Fair
Derby District Fair
Southern Iowa Fair
Marion County Fair
Marshall County Fair
Mills County Fair
Mitchell County Fair
Monona County Fair
Monroe County Fair
West Liberty Fair
Sheldon Fair
Clarinda Fair
Shenandoah Fair

REPORT OF THE CREDENTIAL COMMITTEE—Continued

Pottawattamie County Fair
Brooklyn Agriculture Fair
Sac County Fair
Mississippi Valley Fair
Shelby County Fair
Central Iowa Fair
Tama County Fair
Taylor County Fair
Van Buren County Fair
Wapello County Fair
Warren County Fair
Wayne County Fair
Hawkeye Fair and Exposition
Winnebago County Fair
Winneshiek County Fair
Inter-State Fair
North County Fair
Pocahontas County Fair
Tri-County Fair
Carroll County Fair
Humboldt County Fair
Soo County Fair
Lyon County Fair

Credential Committee,
J. C. BECKNER,
F. B. SELBY,
CHAS. H. BARBER.

President Estel: The next is the election of officers. The first in order will be nominations for president for the ensuing year.

Mr. Bentley: I would like to place in nomination Mr. L. W. Emery, present vice-president.

Mr. J. C. Bicknel: I second the nomination.

Member: I would like to place in nomination the name of our present president, E. S. Estel from Waterloo.

Member: I second the nomination.

(Here the president called Mr. Moore to the chair.)

Chairman Moore: Are there any more nominations? If there are no objections I will declare nominations closed. I will appoint Pat Bacon, Mose Stanbery and Bill Smith as tellers. The secretary will call the roll.

(Roll call was had and ballot taken and the tellers retired to count the ballot. President Estel resumed the chair.)

President Estel: The next thing in order will be nominations for secretary for the ensuing year.

Mr. Mullen: I nominate Mr. Wilkinson to succeed himself.

The nomination was seconded.

Mr. Moore: I move that nominations be closed, and the president be instructed to cast the unanimous ballot of the association for Mr. Wilkinson as secretary.

The motion was seconded and carried and the ballot cast for Mr. Wilkinson.

President Estel: The next is nominations for Treasurer.

Mr. Clark: I take pleasure in nominating Mr. Rowland to serve for another year as treasurer.

Mr. Canby: I second the motion.

Mr. Clark: I move that nominations be closed and the secretary instructed to cast the entire vote for Mr. Rowland.

The motion was seconded and carried and the unanimous vote cast for Mr. Rowland.

Mr. Bacon: The result of the ballot for president is as follows: Total number of votes cast, 78; Estel received 50 votes and Emery 28 votes.

Chairman Moore: You have heard the report of the tellers, and on said report the chair declares Mr. E. S. Estel of Waterloo duly elected president for the ensuing year.

President Estel: The next in order is nominations for vice president.

Member: I nominate vice president L. W. Emery to succeed himself.

The nomination was seconded.

I move that nominations cease and that the secretary be instructed to cast the unanimous vote of the association for Mr. Emery.

Motion seconded and prevailed and the unanimous ballot was cast for Mr. Emery.

President Estel: We will now hear from Mr. A. R. Corey in regard to Rain Insurance for Iowa Fairs.

RAIN INSURANCE FOR FAIRS

By A. R. Corey, Secretary, Iowa State Fair

Mr. Chairman and delegates of the County Fair Managers' Convention: As requested by the Program Committee, I have endeavored to collect and tabulate data covering the subject of Rain Insurance for Fairs.

A questionnaire on this subject was prepared and mailed to the secretaries of the county and district fairs and practically all have responded to it. The reports of these fair managers show that there was considerably more interest in rain insurance this year than a year ago. Forty-two fairs in the state of Iowa carried rain insurance this year as compared with eighteen in 1921. The total insurance carried was $308,550.00, and the premiums or cost of the insurance amounted to $35,423.53. Nine of these fairs collected $17,750.00 in losses. Comparing the cost and benefit of rain insurance for the years 1921 and 1922 the results have just been reversed. In 1921 eighteen fairs carried $221,500.00 insurance at a cost of $18,359.80, and collected in losses $56,801.17. In 1922 forty-two fairs carried $308,550, at the cost of $35,423.53 and collected $17,750.

The reports reflect a wide difference of opinion among fair managers as to the advisability of carrying insurance. Among the 92 fairs replying to the inquiry, 37 favor insurance and 41 oppose it for various reasons. Fourteen were non-committal. The general opinion of those opposed to rain insurance is that if the fair is to be properly covered by insurance, the cost at the present rates is altogether too high, making it almost prohibitive. Those in favor of rain insurance contend that it is like any other kind of insurance. It is a protection against loss of a specific kind, the same as fire, tornado or life insurance. They also contend that if the fair's finances are in bad shape, the fair cannot afford to carry the risk. There is another thought brought out in these inquiries namely, that where a fair is successful in putting on a large advance sale of season tickets, this will in a way take the place of insurance.

For your information I would like to quote the opinion of a number of fair secretaries on rain insurance, as reported in the questionaire. The quotations used are from all sections of the state and have been selected as they express the diversified opinions of the secretaries reporting.

Crawford County: "Rain insurance is a good idea if handled properly. The insurance should cover the entire 24 hours. The premium is but little more and it eliminates all of the risk rather than making a bigger gamble out of it. We carried insurance from 6:00 a. m. until 12:00 noon, thinking that if it did not rain enough in the morning to collect, it would not keep our crowd away. We had a very cloudy morning and a deluge between 1:00 and 6:00 p. m. that completely ruined our attendance for the day, but we were unable to collect any insurance."

Benton County: "I think rain insurance is a mighty good thing if the kind of soil and the condition of the roads in the locality are such that they make auto travel impossible after a rain."

Buena Vista County: "I am really not much in favor of rain insurance except in some particular cases. If the fair is carrying a heavy indebtedness and is so fixed that a "rain-out" would mean bankruptcy, I believe that it is advisable to carry this protection, provided the advance sale of season tickets is very light. If a fair is in good shape financially I see no need of this insurance. A large advance sale of season tickets is the best insurance and costs nothing."

Marion County: "We are not very enthusiastic about rain insurance unless it can be secured at a more reasonable rate. We insured for 12 hours each day from 2:00 a. m. until 2:00 p. m. against .20 of an inch of rain. On Wednesday it drizzled and rained .13 of an inch during the 12 hours. The fair was spoiled for the day but we were unable to collect any insurance. On Friday we guessed right and collected a little more than enough to pay the premium."

Tama County: "I would favor rain insurance if we could get a 24-hour coverage at a reasonable rate. Had we insured this year and last year on a 10-hour coverage basis we would have been out money both years."

Warren County: "This year we had a heavy rain over the county, but very little locally. It kept the people from coming from a distance. We estimated our loss for afternoon and night at $1,000. Rain insurance would have done us no good as it did not rain .20 of an inch on the grounds."

Audubon County: "Rates are too high for the forms now in use. It is possible to have the attendance ruined and yet have no protection.

Twenty-four-hour protection is the best procurable now, but rate is prohibitive."

Marshall County: "I estimate that if we had carried rain insurance for the past 17 years, the time our fair has been in operation, the cost of the insurance for this period of years based on the rate quoted in 1921 and 1922, we would have been out at least $7,500. For a period of years I think it is a losing game for the fairs, otherwise the insurance companies would not be so anxious for the business."

Worth County: "Nine fairs have been held under our present management and out of this number only one has in any way been affected on account of rain, and this was the only year that did not show a profit. This is likely the reason why we have not been more interested in rain insurance. We believe, however, that it is only a matter of time until rates on this class of insurance will be established so that we can all take out a reasonable amount. I am in favor of rain insurance."

Kossuth County: "Our experience with rain insurance has been very satisfactory. Last year the policy cost us about $800 and we collected $1,450. This year on September 7th we had .24 of an inch rain early in the morning which did not spoil our day, but in fact benefited us, nevertheless we collected the $3,000 insurance carried that day because of the form of the policy we took out."

Sac County: "I think it is the only thing for fairs and other outdoor attractions. If you get rained out the insurance comes in mighty handy, and if you have good weather the premium does not amount to much. Our insurance this year called for .20 of an inch of rain within a certain period. We got .21 of an inch and were able to collect."

In summing up the comments on rain insurance it is evident that the secretaries are about equally divided for and against insurance. According to these reports the average rate on all insurance written in 1922 was 11.5 per cent and the average rate for 1921 was 8.3 per cent. The replies would also indicate that the change in the forms of policies written this year resulted in decreasing the liabilities of the insurance companies, and for that reason the fairs did not receive the protection and benfit they did under the policies written in 1921.

For the information of this organization I am attaching hereto a detailed statement showing the amount of insurance carried, cost and the amount collected by the 42 fairs that carried insurance this year.

The following tabulation gives detailed information for each fair carrying rain insurance for 1922:

Name of Fair	Location	Amount of Insurance Carried	Cost of Insurance	Amount Collected
Benton County Fair	Vinton	$ 8,000.00	$ 1,370.20	....
Buchanan County Fair	Independence	7,000.00	816.00	....
Buena Vista County Fair	Alta	4,500.00	499.55	....
Rockwell City Fair	Rockwell City	3,000.00	300.00	....
Carroll County Fair	Carroll	5,000.00	586.00	....
Cedar County Fair	Tipton	4,000.00	575.00	....
North Iowa Fair	Mason City	11,000.00	934.00	....
Big Four Fair	Nashua	4,000.00	291.67	....
Crawford County Fair	Arion	1,000.00	233.20	....
The Elkader Fair	Elkader	4,000.00	532.80	....
Tri-County Fair	Perry	4,000.00	399.00	....
Decatur County Fair	Leon	9,000.00	787.50	$ 2,500.00
Delaware County Fair	Manchester	10,000.00	1,516.60	....
Fayette County Fair	West Union	7,000.00	543.90	....
Hamburg Fair	Hamburg	2,750.00	399.90	750.00
Guthrie County Fair	Guthrie Center	2,700.00	315.09	....
Hamilton County Exposition	Webster City	3,000.00	320.70	2,000.00
Hancock County Fair	Britt	5,000.00	456.25	....
Hardin County Fair	Eldora	6,000.00	400.20	....
Jackson County Fair	Maquoketa	4,600.00	536.00	....
Jefferson County Fair	Fairfield	14,000.00	975.00	....
Anamosa District Fair	Anamosa	4,000.00	533.32	....
Jones County Fair	Monticello	5,000.00	667.50	....
What Cheer Fair and Exposition	What Cheer	3,000.00	394.20	....
Kossuth County Fair	Algona	8,000.00	933.60	3,000.00
Columbus Jct. District Fair	Columbus Junction	8,000.00	800.00	....
Marion County Fair	Knoxville	5,000.00	750.00	1,000.00
Mills County Fair	Malvern	7,000.00	799.90	....
Mitchell County Fair	Osage	6,000.00	466.20	....
Monroe County Fair	Albia	2,000.00	233.20	....
O'Brien County Fair	Sheldon	8,000.00	621.60	....
Poweshiek County Fair	Malcolm	1,000.00	200.00	500.00
Clarinda Fair	Clarinda	6,000.00	799.80	....
Sac County Fair	Sac City	4,500.00	488.00	2,250.00
Schleswig District Fair	Schleswig	2,500.00	243.25	....
Mississippi Valley Fair and Exposition	Davenport	41,000.00	5,899.50	....
Central Iowa Fair	Ames	2,000.00	199.90	500.00
Hawkeye Fair and Exposition	Fort Dodge	20,000.00	2,500.00	....
Winnebago County Fair	Forest City	5,000.00	437.50	....
Interstate Fair	Sioux City	45,000.00	5,251.50	5,250.00
Boone County Fair	Ogden	4,000.00	222.00	....
Plymouth County Fair	Le Mars	2,000.00	194.00	....
	Total	$308,550.00	$35,423.53	$17,750.00

President Estel: Next on our program is "The Sale of Advance Season Tickets," by Mr. C. E. Beman, of Oskaloosa.

Mr. Beman: I am a firm believer in season tickets sold before the beginning of the fair.

In the organization of our fair seven years ago, when a few of us got together and organized and started our fair, I was elected treasurer and superintendent of gates and tickets. I don't know how it came to me just now, but I introduced to the board the idea of season tickets. Some were for them and some against. However, those that were for were in a majority and we started out to sell season tickets at our fair and, from my point of view, I may say to you today that it has been a success, and season tickets, well worked, do a great deal to make a fair successful. A season ticket, well worked, will mean anywhere from three to seven or eight thousand dollars in your treasury before you open the fair.

I think a season ticket should be a ticket that you can sell for $2.00, assuming that your fair charges fifty cents gate admission. I would put in that book, which has been the most successful book we have had, four fifty cent tickets, and four twenty-five cent tickets. In that way you give the fellow who buys a ticket before the fair $3.00 worth of tickets for $2.00. You have the $2.00 in your treasury and you give them the $1.00 for buying the ticket.

The question may be asked why the four twenty-five cent tickets. I notice a number of you have a twenty-five cent rate after four o'clock or five o'clock. People desiring to come in can use the twenty-five cent ticket. Our tickets are transferable. You may buy a ticket and if you want to bring your family in with it and you have five in the family, and a car, you use four of these fifty cent tickets and two of the twenty-five cent tickets for the other adult, and one twenty-five cent ticket for the car. They can use them any time during the fair and the family can use them.

Before I started away I just had received a copy of this program and I hastily picked up three reports I had made as treasurer the past three years, to note the amount of season tickets sold before the fair and I will give you the result in dollars. In 1920 we had a five-day fair and we sold $7,190 worth of season tickets. In 1921 a four-day fair and $4,994. In 1922 a four-day fair, and $5,227. This last year we dropped back to a ticket for $1.50, three full tickets and three twenty-five cent tickets.

The ticket this year will be the $2.00 ticket and any of you people who, after hearing this, decide to try a season ticket, and you charge fifty cents, I will advise you to use the ticket I have illustrated. Make it fully transferable, four fifty-cent tickets and four twenty-five cent tickets. There will be some questions asked, perhaps, as to pass-out checks. I don't know what your custom is about that but we don't give pass-out checks. Of course we do extend favors. You have to extend favors to be a good fair man, but you have to extend them with reason and judgment. The first year I was treasurer people would come to the gates and want in just to see a man for ten minutes and come right back, and these fellows rarely ever came back. So I say to the men who are selling tickets, take his name, take his fifty cents, and tell him if he is back in thirty minutes the fifty cents is his, if not, it is ours. That is a matter of accommodation and some men who buy season tickets will ask you the question whether or not they can go out. Of course you have the season ticket, they have the book and you know the man. We grant that, but we don't grant pass-out checks with season tickets. As before stated to you, a twenty-five cent ticket pays for the automobile, pays for entry to the ground after 4:30, and the fact you give him an extra dollar of tickets gets them to purchase it. I put tickets in the banks, dry goods stores, drug stores, and we work the sale of them, but I want to say to you that if I would work them in a real way I could sell a good many more tickets than I do, and we always start our fair with five to seven thousand dollars in the treasury before the fair gates are open, due to the sale of season tickets.

Member: I would like to ask one question, do you permit the removal of these tickets from the books?

Mr. Beaman: We take the tickets out as they come in. They come to the gate and we see how many are in the car, and we tear out the number necessary and pass them in.

Member: What I was getting at, was this: If I bought one of these season tickets; could I tear out four tickets and hand them to my friends and let them come in on them?

Mr. Beaman: No, sir. When they come to the gate we tear out the tickets and when they are all torn out of the book they are through with it.

Member: What percentage of total paid admissions at the gate do you usually sell in season tickets?

Mr. Beaman: About one-fifth.

Mr. Harvey: I would like to inquire how long before the fair opens you begin to sell tickets?

Mr. Beaman: We sell them ten days before and don't allow them to buy them after the fair is open. They will try it but you have to use a rigid rule and say "no" then.

President Estel: We will have the report of the Resolutions Committee by Mr. Quarton, of Algona.

REPORT OF THE RESOLUTIONS COMMITTEE

We, the Iowa Fair Managers' Association, in convention assembled, desire to express our appreciation for the cooperation and support given this association by the officers and directors of the Iowa State Fair, and conducting our affairs for the past season.

And further be it resolved, That we recommend that a uniform classification be adopted for all Iowa fairs, with a minimum and maximum premium, and in order to bring about this result we recommend that the secretary of the Iowa Fair Managers' Association, cooperate with the secretary of the Department of Agriculture of Iowa, by being instructed to prepare such classification and mail the same to each member of this organization.

And whereas, There has been some misunderstanding in reference to the enforcement of a certain rule as contained in our premium books, as it refers to exhibitors who show in classes where there is no competition which reads as follows: Where there is but a single exhibitor in a class the judge shall award but one premium, where two, two premiums may be awarded, and where three or more as many premiums may be awarded as there are exhibitors in the class, except as otherwise provided in social rules under head of department.

Therefore be it resolved, That the Iowa Fair Managers' Association go on record as approving this rule and recommend the strict enforcement of same by all members of this association.

That there has been considerable misunderstanding regarding the application of the rule, as it applies to the testing of cattle which rule reads as follows:

Rule 11 (Amended).

All cattle for exhibition or other purposes at the Iowa State Fair or any fair or exhibition held within the state of Iowa, shall be either from a Tuberculosis-Free Accredited Herd or from a herd that has passed one clean test, within one year, under the cooperative plan for the accrediting of herds. Cattle other than those above specified shall have passed a satisfactory tuberculin test and found to be free from tuberculosis not more than 90 days prior to the opening date of exhibition at each fair.

Therefore be it resolved, That the Iowa Fair Managers' Association go on record as approving this rule and recommend carrying out and strict enforcement of same, and that any failure on the part of either exhibitor or the fair management in enforcing this rule be promptly reported to the State Veterinarian of Iowa for the protection of all exhibitors.

We further recommend that all members of this association who conduct harness horse racing employ license timers, and that all special suppression time be eliminated.

Be it resolved, That the Iowa Fair Managers' Association go on record in favor of rigid economy in the conduct of its affairs, but that the dues be not lowered until a sufficient and adequate fund has been accumulated to take care of the legitimate needs of this association, especially for educational, publicity and legislative purposes. Respectfully submitted,

(Signed)
S. D. QUARTON,
E. W. WILLIAMS,
H. S. STANBERY.

Mr. Quarton: I move the adoption of the resolutions as presented.

The motion seconded.

President Estel: You have heard the motion that the resolutions as read be adopted. All in favor of the motion signify by saying aye. Contrary the same sign. The motion is carried and the resolutions are adopted.

We will now hear from Mr. Williams.

Mr. E. W. Williams: Iowa fair managers and secretaries must take an invoice of themselves. For this reason many of the fairs of Iowa are not up to the standard they should be. They are spending more money than they are really taking in. After you arrive home, take last year's book and look up the number of stock listed in each department, the amount of profit made, and the amount of money expended for free acts, etc. There are some of these fairs misrepresenting last year unintentionally, we will put it, or else their program will fall mightily behind this year in the amount allowed to races and ball games and free acts. I think many fairs are misrepresenting the facts of their fair. I think that each fair should take a change and an invoice of themselves and see where they stand, and I think many of you men here will agree with me that many of the fairs are going beyond their means.

So I say if the fair managers, whether by districts as laid out by our association or not, take the fairs within say a radius of thirty miles that have railroad connections, and have the managers meet at some central point. In our eastern district we take in a list of fairs such as Strawberry Point, Manchester, Independence, Jesup, Marion, Maquoketa, Elkader and West Union.

We take an invoice of ourselves. Are you furnishing everything free to the exhibitors, are you allowing pass-out checks, and such things as that?

You should get together and talk over what purses you will put up, what program you are going to put up. Personally, I think many of us fairs, and I am including myself in this, have been trying to outdo each other. I am in favor of the exhibitor and the concession man, and I believe if we men will get together and talk over these things every summer we will do away with some of these expenses. Arrange your race cards. Arrange your baseball games. At Independence in our district this year we put up a hundred dollar purse, divided sixty and forty for baseball, and when I arrived home I had three letters upon my desk in a week from baseball teams in our county that we had helped while the war was on, saying that they would not play for that. These baseball teams did not take into consideration what we had been doing and they all wanted a $250 guarantee. By our organization our three fairs saved ourselves $400. I believe we have to have our organizations and I think that the secretary has got all your counties laid out on the letterhead, and if you can't work in harmony with all of your fairs, in your district, you should submit the question and have a change of arrangement so that you can. Have it so it is convenient and then you can meet and take up the smallest details and you can work them out. I worked one year with Waverly on a change of acts, but that is an exception and I know there are not many towns arranged on the railroads so you can. But if the Iowa fair secretaries ever in the world should take an invoice of themselves financially, I believe it is now and the district meetings to me are the best thing we have ever had.

President Estel: Mr. Wilkinson, our secretary, has very interesting things to tell us in regard to the Toronto meeting which he attended for the organization, and before we get into the questions it would probably be well to have Mr. Wilkinson give us a review of that meeting and what it accomplished.

Secretary Wilkinson: I was going to give you a review of the year's work starting from the last annual meeting. The results of the last annual meeting you all received many months ago in this printed pamphlet which Mr. Corey sent out and I think there is no need of going over that. In accordance with a motion made during the meeting last year it was recommended that this association apply for membership in the International Association of Fairs and Exhibitions and that our representative be at their meeting provided we could obtain membership. I went to Chicago last February and was successful in obtaining membership for this organization in the International Association. The International Association works on matters that are of great interest and great benefit to all fairs. I am sure we will be very well repaid for every cent it cost to belong to the association.

At several times during the spring and summer we received bulletins from Don B. Moore, secretary of that association, which I had printed in cicular form and mailed to all members of this association. One of these bulletins told of freight classifications. They dealt with a reduction of passenger fare rates and gave rates for your fare returns. Another thing that came up during the summer was through the newspapers of this state taking the matter up with me and wanting me to advise the members of the association regarding the collection of the tax or license for eating stands and eating houses on fair grounds as required by law.

The International Association of Fairs and Exhibitions held their meeting at Toronto this year on Thanksgiving week. The main topic of the meeting was the carnival fair clean-up which the Billboard has been pushing for the past few months. There was a great deal of argument and strife started by some fair men present who took exception to certain articles that had been printed and certain statements made, but nevertheless after a great deal of argument the resolution which appeared in the Billboard was adopted. The point that they were actually taken on is that gambling for money with or without protest be prohibited on all fair grounds. They also referred to the '49 Camps or shows where the men dance with hired women, and a number of other things. I believe in the state of Iowa we were a little above these things as we have for a number of years prohibited these things, and the fairs in general have been very clean in the state of Iowa for years.

President Estel: We have just a few questions we want to have answered. This is one of the questions—"Would it be possible to get the legislature to amend the law providing for state aid to the county fairs so as not to compel them to publish the list of premium awards?"

Member: That is my question. Before we got this additional state aid it was not necessary to publish a list of premium awards. Now with this new law it is costing us in the neighborhood of $150 to have this list of awards published, and I presume you are all in exactly the same boat. We appreciate state aid but I hate to give seven and a half or ten per cent to the newspapers to publish this in order to get it.

Member: I would like to speak on this subject just a minute from a newspaper man's standpoint. We newspaper men always like to have the fair premiums, and most always have made an effort to get them, and publish them when they were of news value, but the law as provided at the present time a good many secretaries delay the preparing of this list as it is to be published, until it ceases to be of news value. On the other hand, it is perfectly legitimate that the newspaper should have some compensation of publishing that. It is usually published quite a number of weeks after the fair is over, and from a newspaper man's standpoint it ceases to be of very much news value at that time.

Mr. Graves: I would like to say in connection with this publication of the premium list, I find that if the secretary will get this into the hands of the newspapers within the next week after the fair closes, they are always glad to publish it and if the secretary will take it to the papers I think he comes within the meaning of the state law if he reports that to the state department with this clipping. But if he puts it off and the editor has to make a special notice of it afterwards, I know in one instance it cost us $132 because we didn't clip the papers. Otherwise I don't think there is any added expense for that.

Mr. Corey: Just a word along this line. I don't recall just now who was chairman of your legislative committee at the time this law was passed, but I believe it was Mr. Ridgley of Independence. If you recall when the Taylor bill was before the committee, some provision was made in the bill for the publication of the awards. They contended if the state was appropriating something like $2,000 maximum there should be a statement published as to who this money was going to. Another thought was brought out at that time that the exhibitors who make your show are entitled to and appreciate this advertising. I think as the gentleman said, if the county fair secretaries will try to get this to the newspapers within a week or so after the fair, practically all of them are glad to publish it as news.

As far as the department is concerned we have tried to be very liberal in the interpretation of the law, and accepted published lists of awards in various forms. At one time I believe we sent out a skeleton form and suggested how we would like to have the awards published, and a good many fairs followed that. The idea was, for instance, taking the shorthorn class, simply show the amount of award paid each exhibitor in that class. Some fairs go much farther than that, and show first and second place. You recall at that time it was one of the things that the committee contended for, the publication of the award so the state might know where the money was going.

Mr. Hunt: We find it mighty good business to pay the newspapers for publishing this for all the free space we get during the fair.

Mr. Emery: I agree with the gentleman that it is good business to pay for publication of the premium list. At Spencer I get a lot of publicity from our two newspapers. Possibly some of you gentlemen received the special fair edition of the News Herald, forty-eight pages the week before our fair. It is certainly wonderful publicity and I give each paper the premium list and I think it pays, and I certainly would not want to have any law or rule whereby I could not pay my two papers this money for publishing this premium list. I had a secretary write me two or three years ago and ask me how I worked my newspapers to get this publicity. I say that a good secretary can get all this publicity if he will treat his newspapers right and get them interested in his fair.

President Estel: Is there any further discussion? If not, we will have the next question read.

Secretary Wilkinson: Is the time coming when County Fairs will be consolidated into district fairs of four or more counties?

(Answers of "no," "never," "I hope not.")

President Estel: The next question?

Secretary Wilkinson: After nine years of evening fireworks program, would it pay us to change our evening show?

(Answers of "No" and "Yes.")

Secretary Wilkinson: How do you handle stockholders' tickets, I mean what concessions do you make to stockholders?

(Answers of "none.")

Member: How do you handle it?

(Answers "They pay.")

Member: We don't make any concessions to stockholders. The fair don't pay dividends of any kind and the men who put their money in go through the gates and buy tickets.

Mr. Selby: In Wayne county our president, secretary and treasurer pay for their tickets, every stockholder buys his ticket and we pay no salary or dividends.

Member: We followed that same plan this year at our fair and it worked out fine. The president bought his ticket the same as anybody else.

Member: If I buy my ticket I won't be president, I'll tell the world that. I spend three months getting ready and I am not going to pay to get in. The president is furnishing his time for nothing during two or three weeks or for a month, or maybe twelve months, and then if he has got to pay his fare into the fair I will say that man is crazy, that is all there is to that.

President Estel: Let's have a show of hands as to how many fairs represented here give free admission to stockholders. Five furnish stockholders free admission.

Mr. Cooper: Our fair association is organized under the state laws and we have eighty stockholders. We give the stockholders tickets into the fair, they buy shares for $100 and they have put in that much money and they never get anything out of that money outside of admission at the outside gate, and I am like this man here, if I didn't put up these tickets I would have to move from town. I refer to a season ticket that admits the man and his family, his children under eighteen years of age.

President Estel: We are now adjourned.

PART III

Proceedings of State Agricultural Convention, House Chamber, State House, Des Moines, Iowa, December 13, 1922

The convention was called to order at 10:00 a. m., by President Cameron who announced that they would start the meeting with community singing led by Alfred H. Smith of Des Moines.

Vice President J. P. Mullen: Gentlemen we will now proceed with the regular program. The first topic will be the annual address by President C. E. Cameron.

President Cameron: Gentlemen of the Convention and Fair Managers—We have passed another milestone in state fair history with very satisfactory results. When we consider the condition of the money market and the low prices that prevailed for farm products for the last year, I venture the statement, all these things considered, that from a financial standpoint and in all that goes to make a well balanced show, this year's fair equalled, if it did not actually surpass, all previous efforts. I am led to this belief by the unusual number of high class exhibits shown in all departments, their ideal classification and arrangement, and by the efficient service rendered by those in whose care the exhibits were placed. It is a great pleasure to note this favorable comment on the fair work, for criticism was barely noticeable this year, or at least minimized to an unusual degree.

Of course there were many other features of the fair deserving of special mention, but the fact that this particular phase was not overlooked, making it pleasant as well as profitable for the patrons of the fair is surely gratifying to everyone who had anything to do with making the fair a success. There are some things about the preliminary details of the 1922 fair that I want to tell you; some things about the conditions that actually existed when we commenced planning for it. I am doing this because the conditions at that time were so unusual that many perplexities confronted us, and I want to tell you how we met them.

In planning for this year's fair I am frank to tell you, the board had some misgivings regarding the final outcome. There were plenty of reasons for this uncertainty. You are all aware that this is to a great extent an agricultural state; consequently our people depend in great measure on the prices received for live stock and farm products for their prosperity. The Iowa State Fair, too, is recognized and is predominantly an agricultural and live stock show. So that on the well being of this class of people the fair must depend for support.

At this time last year deflation had reached its lowest ebb; values were affected in every line, things were running against the producer; prices of farm crops were especially low; selling was admittedly at a loss to the farmer. It looked very doubtful if this class of people would be in the mood or could afford to spend the time to attend the fair.

Other lines of industry it is true suffered untold distress, but the farmer because of his inability to dispose of his products through an effective selling organization, and forced to sell at ruinous and unprofitable prices to meet his pressing obligations, was unquestionably hit the hardest of all our people.

This was the situation at this time among the people who make the state fair and the county and district fairs successful. So, for the board, it seemed largely to be a guess which way to turn. It was a question as to the best thing to do in planning for the 1922 fair. You may be sure that there was plenty of discussion and there were differences of opinion, but on one point at least there was immediate and harmonious decision, "In All That Is Good Iowa Affords the Best," and the proud position of the Iowa State Fair at home and the enviable reputation it holds as a leader among similar institutions in the nation, was not to be surrendered or abridged, but maintained at all costs. I want you to remember that the 1921 fair barely played even, exclusive of maintenance. Since that time the office expense and the maintenance of grounds and buildings, besides other necessary and incidental items of expense were rapidly eating up the surplus carried over from the previous more prosperous years. To keep the fair going with its old time prestige, to offer and to pay the usual quota in premiums and to carry out a program in keeping with the past record of the institution; to do all this, and in addition to reduce the admission at the outside gates to the popular pre-war price of fifty cents would assuredly mean that expenses must be cut somewhere along the line. It had to be cut to the amount of thirty-five or forty thousand dollars if the total receipts and expenditures of the 1921 fair were used as a basis. This was the situation that confronted the board when they faced the problem of finding ways and means for financing the 1922 fair.

After some reflection the board became convinced that a sharp decrease in expenditures was absolutely unavoidable. Where to make this cut in expenses without impairing the worthy features, was the all-important factor to be solved. The action taken by the board to meet this unusual situation worked out so successfully that I am pleased to inform you that this great saving was accomplished through the practical application of the budget system to all departments of the fair.

I am sure that you will be very much interested when I tell you that this was effected without any perceptible reduction in premiums or in any of the features that add to the educational and permanent value of the fair. It was to a great extent deducted from the features that are termed recreational, such as amusements, attractions, racing and also through a very substantial reduction in the number and daily wage of all the assistants, helpers and employes. There existed some opposition and minor objections to such drastic action, but the board seemed fully justified in taking the initiative as a matter of public economy as well as to sponsor a program that would bring results.

Many of you fair men have a similar situation at home in trying to make both ends meet, so I wish seriously to recommend that you adopt the budget system in all the departments of your fairs. In conducting your fairs exercise great care in keeping the expenses below the probable average receipts. If you do this and apply the budget system fearlessly your fears and problems will soon disappear. By liberal and judicious methods of advertising aided by special features which seemed to possess great drawing powers the fair not only showed an increased attendance but a very handsome profit. In spite of many apparent earlier handicaps the count showed a greatly increased attendance over 1921. Our Iowa friends and patrons ought to take just pride in this achievement, for no other state fair showed such an increased attendance as did the Iowa State Fair this year.

Approximately three hundred sixty thousand people passed through the turnstiles. This is an increase of sixty thousand over 1921 and to my mind tells the wonderful drawing power of the state fair. There must surely be some reason for this continued support from the rural population of the state, and I believe it is found in the fact that the state fair is recognized and supported as one of the successful and worthy state institutions. It belongs to all the people of the state and by their unstinted patronage the people manifest both a state and personal pride in its success. So much for the fair, if anything more is needed its continued success speaks for itself.

Just a word on farming and the farmer—for the last two or three years his lot has not been a pleasant one. Because of the severe reaction from war-time prices and the depreciation in values which followed so rapidly, the farmer was caught holding the sack, without ability to meet his obligations from the diminished proceeds of his own and his family's labors. The part the farmer plays in producing the necessities of life is surely an important one, for on his labors or success of his labors depend the welfare of the whole human family. If he cannot realize a profit on the fruits of his labor it becomes only a matter of time until he will change his calling or find it convenient to limit production, resulting in consequent hardships for the millions of people who most depend for their daily bread on the labors of others. For this reason the state and national governments should manifest an interest in his burdens, and cooperate with him in the enactment of legislation to provide better marketing facilities to stabilize prices, and to afford him a reasonable return on his investment. Many things can be done for him without injury to any other business or industry. I refer in a larger sense to the increase of the Federal Farm Loan maximum to any one borrower of $25,000.00. Also to the continuation of the War Finance Board, operated on a practical basis of credit; with its sphere of activity increased to meet every reasonable requirement. The Federal Reserve Bank also can help greatly in a more liberal recognition of the borrowing power of live stock and farming communities in comparison with other industries of the country. These organizations and others have unquestionably rendered valuable service, but I have in mind the greater good that they may yet accomplish.

It is very noticeable, more than ever before, that there is a greater willingness to help the farmer with his burdens. This is as it should be and is a good augury for the future. For on the prosperity of the farmer depends, in large measure, the prosperity of the nation. There will be no permanent national prosperity until the farmer is enabled to come back again into the nation's markets as a buyer, with cash to spend. Then and not until then will the wheels of industry hum for the comfort and prosperity of the whole country. Evidence is accumulating every day that the farmer is coming back; that he will realize more on this year's crop than on any of the two previous ones. He is by no means out of the woods but he is on the way and his prospects appear much brighter than a year ago. With bounteous crops, and a rising market, obligations will be more easily met, the buying power of the farmer will increase, and a new turn in the road is just ahead. With better prospects and a brighter future the financial disturbances of the last few years will untimately disappear and be forgotten.

For such a day we ought be thankful and to welcome its coming. The citizenship of our state, patient, but alert, will readily respond to the touch of a better outlook, and the old commonwealth of Iowa, asking only for an even start and a fair chance, will again shine with added lustre and blossom with abundance for the comfort and happiness of all our people.

President Cameron: The next order of business is the appointment of the following committees: Committee on Credentials: H. L. Pike, Monona; R. S. Johnson, Louisa; H. M. Stafford, Fayette.

The Committee on Resolutions: R. R. Clark, Grundy; C. A. Wenstrand, Page; C. F. Curtiss, Story.

We will now have the report of our Secretary A. R. Corey.

Secretary A. R. Corey: As usual, I have submitted my report in printed form to this convention. There are just a few things I would like to say, however, that I learned while at the National Convention last week. I don't know whether we all appreciate it or not, but the attendance at the Iowa State Fair this year increased about twenty-three per cent, and on the figures given by the statistical committee of the International Association of Fairs no other fair showed an increase like this. In fact, the attendance at the Iowa State Fair equalled the attendance of the Michigan State Fair, which is held in a city of over a million population. Our attendance came within 20,000 of the great Minnesota fair which has a million people within street car riding distance of their grounds. Financially, I think there was only one other fair in the United States that came out better than Iowa did this year. That was Minnesota. Minnesota still maintained this seventy-five cent admission at the outside gate and all of the other war-time admissions at the grand stand and their horse show.

In regard to the exhibit at the State Fair this year, which is the basis for judging all agricultural fairs, or should be, of course it makes us all feel good if the balance comes out on the right side, showing a profit, but when it comes down to facts we must judge live stock and agricultural fairs from the exhibit standpoint. There is no question but that the Iowa State Fair had the best balanced live stock show in its history. In fact, a larger percentage of our premiums were called for this year than ever before. Practically every class was filled. We are also very proud of the exhibit in the agricultural building which was well filled with county exhibits and individual farm exhibits, and a wonderful horticultural show.

Mr. Cameron has spoken to you about the budget system. I really feel very proud of the work the Board did this year. I think you all realize it is a very easy matter to add to your premiums and add to the expenses of your fair. We got into that habit during the war. But when you come to cut down it is rather a hard proposition. Mr. Cameron told you that at the meeting in March the board went over this very carefully and made out a budget calling for a reduction of about $35,000. This called for a good big cut in a number of departments, especially in some of the amusement features, but I want to say that every member of the Board put his shoulder to the wheel and worked with the Executive Committee, and the superintendents outside of members of the Board did the same thing, and after the fair was over and our books were balanced they showed we only ran over our budget about three per cent. In fact, the expenses of the fair, other than premiums only overran $2,000. I feel that is a wonderful showing.

Some of the other fairs operate on this same basis and I was discussing the matter with them during our meeting in Chicago, and one fair manager said, "We always make up a budget, we did again this year, but overshot about $15,000. We were pretty well pleased," he said. "We usually go over from $20,000 to $25,000."

We have worked out this budget system before in different departments, that is for advertising, attractions and things of that kind, but this was the first year we ever applied the budget system to all departments of the fair. This matter was also discussed by the county fair managers last year and I believe they profited by it. I noticed in tabulating the expenses of the county fairs in the state of Iowa this year that they reduced their operating expenses about five per cent. That is quite a creditable showing because it has been going the other way for a good many years.

Now, as I said, I have prepared a report of some eighty pages and I have tried to cover every detail of the fair. The financial report is in detail and there are data that cover the exhibits and everything of that nature. I am not going to take time to read any portion of this report. You can all take it home with you and look it over.

REPORT OF THE SECRETARY

A. R. COREY

Iowa Department of Agriculture and The Iowa State Fair and Exposition

There is submitted herewith for the information of the delegates in attendance at the County Fair Managers convention, and the State Agricultural convention, a report covering the county and district fairs held in the State of Iowa during the year 1922, and a report covering the 1922 Iowa State Fair.

The work of the Department of Agriculture will be presented in the Year Book of Agriculture, and a supplement to the Year Book covering the Stallion Registration Division.

The following summary shows the number of stallions enrolled by the Department from January 1, 1922, to November 30, 1922:

	No. Issued	Fees	Total Fees
Pure Bred Stallions:			
Original Certificates	340	$1.00	$ 340.00
Renewal Certificates	1,795	1.00	1,795.00
Transfer Certificates	428	.50	214.00
Grade Stallions:			
Original Certificates	74	1.00	74.00
Renewal Certificates	263	1.00	263.00
Transfer Certificates	38	.50	19.00
Pure Bred Jacks:			
Original Certificates	51	1.00	51.00
Renewal Certificates	423	1.00	423.00
Transfer Certificates	89	.50	44.50
Grade Jacks:			
Original Certificates	45	1.00	45.00
Renewal Certificates	187	1.00	187.00
Transfer Certificates	41	.50	20.50
Duplicate Certificates issued	1	.50	.50
Back fees collected			338.00
Total			$3,814.50
Deposited with treasurer			$3,814.50

The records of the Stallion Registration Division show a decrease in the number of stallions enrolled each year for the past seven years. The best information at hand points to a revival of the draft horse industry. The fact that draft horses at the present time are commanding good prices at the horse markets, and the fact that the value of the draft horse has decreased less during the period of deflation than almost any other product on the farm, lends encouragement to the industry.

The farmer must realize that with the present prices of feed, the horse is the most economical motive power to be used on the farm. He is also aware that the horse is a consumer of the products raised upon the farm and in producing and using horses he is making a greater market for his products.

During the fiscal year ending July 1, 1922, the Department received reports from seventy Farmers Institutes and Short Course Associations. These institutes held 214 sessions, employed 358 speakers and had a total attendance of 64,685. The State Aid paid the institutes on the certificate of the department amounted to $3,533.50.

The Department has published during the year, six editions of "GREATER IOWA," having a preferred mailing list of 18,000. The aims and purposes of the publication has been to place in the hands of those that can use the material to the best advantage, definite information regarding the State of Iowa, laying stress upon the agricultural and live stock industries, and to give the proper information regarding the Iowa State Fair. This publicity work has also been supplemented by news items and notices to the press of the State.

The Department publishes annually the "Iowa Year Book of Agriculture." The volume contains about 800 pages and covers all of the activities of the Department. Among the more important subjects covered are the Farm and Crop statistics collected by the township assessors, comparative statistics covering a period of years, a report of all board and committee meetings of the State Board of Agriculture, a complete report of the State Fair, including the premium awards in all departments, the proceedings of numerous state organizations allied with agriculture, bulletins, addresses and papers upon agriculture and live stock subjects.

COUNTY AND DISTRICT FAIRS

Ninety-five county and district fairs were held in the State of Iowa during the year 1922. This was an increase of three over the previous year.

These fairs received state aid in the sum of $168,062.33, an increase of $10,371.43 over 1921. Fifty-one fairs received the limit of $2,000 each. The average state aid for all fairs was $1,770.00.

The receipts at the outside gates and grandstand show a slight increase over 1921, regardless of the fact that all fairs went back to

50c admission at the outside gate. Their statements show there was an increase of about 8 per cent in the amount of premiums paid and a slight reduction in the expense of all other departments. The decrease in the total expense of these fairs amounted to about 5½ per cent. Sixty-seven fairs showed a profit of $136,144.30 and twenty-seven a loss of $22,836.57, leaving a net profit on all fairs of $113,307.73. These figures take into consideration only the receipts and operating expense of the fair. From this profit and the receipts other than fair, such as stock sold, subscriptions, etc., must be paid the maintenance of the grounds and buildings and any additions or improvements made on the grounds.

The receipts from the fairs were as follows: Outside gates, $566,237.72; grand stand, $188,361.39; entry fees, speed department, $31,617.62; concessions and privileges, $138,316.45; advertising in premium list and programs, $29,946.86; state aid, $168,062.33; miscellaneous receipts, $150,211.49, making the total receipts from the operation of all fairs, $1,272,753.86. Adding to this the balance on hand at the beginning of the year, $85,690.36 and the receipts other than fair, $257,627.52, which includes subscriptions, stock sold, etc., makes the total receipts of all fairs $1,616,071.74.

The disbursements covering the operating expense of these fairs were as follows: Premiums other than speed, $323,217.69; purses for speed events, $197,465.47; music and attractions, $276,580.78, and the miscellaneous expense, $362,182.19, making the total expense of all fairs $1,159,446.13.

In addition to the actual operating expense of the fairs, the indebtedness of previous years paid during the current year amounted to $148,022.28, and there was expended for improvements, maintenance, etc., $234,801.84, making the total disbursements $1,542,270.25.

Sixty-six fairs closed the year with a balance of $105,766.09 on hand. Nineteen show an over-draft of $31,964.60, and ten show their accounts just balance. The grounds and buildings are valued at $3,896,645.60 and the interest bearing indebtedness amounts to $1,133,326.58.

The reports of these fairs indicate that the breeders and other exhibitors are showing a keener interest in these institutions. This is evident by a substantial increase in the number of exhibitors in all departments and the increase in the number of head of live stock shown. There is also evidence of a closer co-operation between the management of these fairs and the farmer and the breeders of the communities in which they are held. This has resulted in a larger number of exhibitors, a larger and better exhibit of live stock and a liberal increase in premiums in all departments.

The total attendance of the ninety-five fairs was 1,571,940, which was an increase of 95,898 over that of 1921. The total paid admissions were 1,273,406, an increase of 64,123. Seventy-nine fairs put on programs in front of the grand stand in the afternoon with an attendance of 374,055. This showed an increase of 42,855 over the previous year. Eighty-two fairs put on night shows with a total attendance of 191,042, an increase of 34,975 over the attendance in 1921.

The reports covering rain insurance show that forty-two fairs carried rain insurance this year as compared with eighteen in 1921. The total insurance carried was $308,550.00 and the premiums amounted to $35,423.53. Nine of these fairs collected $17,750.00 insurance. Comparing the cost and the benefit of rain insurance for the years 1921 and 1922 the results were just reversed. In 1921 eighteen fairs carried $221,500 insurance at a cost of $18,359.80 and collected in losses $56,811.17. In 1922 thirty-nine fairs carried $308,550.00 at a cost of $35,423.53 and collected $17,750.00.

The reports reflect a wide difference of opinion among fair managers as to the advisability of carrying rain insurance. A number contend that figuring over a period of several years, the fairs can best afford to carry their own risk, especially where they are successful in selling season tickets in advance of the fair. Others contend that the rates are too high to warrant carrying insurance. This contention, however, is not borne out if we are to take cost and insurance collected by the fairs in Iowa for the past two years. A number contend that it is possible to have the attendance ruined by rains near the fairgrounds, or on hours not covered by the policy or cold cloudy weather and still be unable to collect any insurance. On the other hand quite a number feel the rain insurance is a life saver for county fairs and no fair can afford to carry their own insurance. Especially is this true with fairs that are badly in debt.

The following tabulation gives detailed information for each fair carrying rain insurance for 1922:

Name of Fair	Location	Amount of Insurance Carried	Cost of Insurance	Amount Collected
Benton County Fair	Vinton	$ 8,000.00	$ 1,370.20	------------
Buchanan County Fair	Independence	7,000.00	816.00	------------
Buena Vista County Fair	Alta	4,500.00	499.55	------------
Rockwell City Fair	Rockwell City	3,000.00	300.00	------------
Carroll County Fair	Carroll	5,000.00	586.00	------------
Cedar County Fair	Tipton	4,000.00	575.00	------------
North Iowa Fair	Mason City	11,000.00	934.00	------------
Big Four Fair	Nashua	4,000.00	291.67	------------
Crawford County Fair	Arion	1,000.00	233.20	------------
The Elkader Fair	Elkader	4,000.00	532.80	------------
Tri-County Fair	Perry	4,000.00	399.00	------------
Decatur County Fair	Leon	9,000.00	787.50	$ 2,500.00
Delaware County Fair	Manchester	10,000.00	1,516.60	------------
Fayette County Fair	West Union	7,000.00	543.90	------------
Hamburg Fair	Hamburg	2,750.00	399.90	750.00
Guthrie County Fair	Guthrie Center	2,700.00	315.09	------------
Hamilton County Exposition	Webster City	3,000.00	320.70	2,000.00
Hancock County Fair	Britt	5,000.00	456.25	------------
Hardin County Fair	Eldora	6,000.00	400.20	------------
Jackson County Fair	Maquoketa	4,600.00	536.00	------------
Jefferson County Fair	Fairfield	14,000.00	975.00	------------
Anamosa District Fair	Anamosa	4,000.00	533.32	------------
Jones County Fair	Monticello	5,000.00	667.50	------------
What Cheer Fair and Exposition	What Cheer	3,000.00	394.20	------------
Kossuth County Fair	Algona	8,000.00	933.60	3,000.00
Columbus Jct. District Fair	Columbus Junction	8,000.00	800.00	------------
Marion County Fair	Knoxville	5,000.00	750.00	1,000.00
Mills County Fair	Malvern	7,000.00	799.90	------------
Mitchell County Fair	Osage	6,000.00	466.20	------------
Monroe County Fair	Albia	2,000.00	233.20	------------
O'Brien County Fair	Sheldon	8,000.00	621.60	------------
Poweshiek County Fair	Malcolm	1,000.00	200.00	500.00
Clarinda Fair	Clarinda	6,000.00	799.80	------------
Sac County Fair	Sac City	4,500.00	488.00	2,250.00
Schleswig District Fair	Schleswig	2,500.00	243.25	------------
Mississippi Valley Fair and Exposition	Davenport	41,000.00	5,899.50	------------
Central Iowa Fair	Ames	2,000.00	199.90	500.00
Hawkeye Fair and Exposition	Fort Dodge	20,000.00	2,500.00	------------
Winnebago County Fair	Forest City	5,000.00	437.50	------------
Interstate Fair	Sioux City	45,000.00	5,251.50	5,250.00
Boone County Fair	Ogden	4,000.00	222.00	------------
Plymouth County Fair	Le Mars	2,000.00	194.00	------------
	Total	$308,550.00	$35,423.53	$17,750.00

There is presented herewith four tables giving detailed information for each fair. Table number one deals with the receipts and disbursements of the fairs and shows the profit or loss. Table number two sets forth the financial condition of each fair; showing the balance on hand at the beginning of the year and the balance or overdraft at the close of the year. Also the appraised value of the grounds and buildings and the interest bearing indebtedness. Table number three gives the number of exhibitors, the number of head of live stock on exhibition and the amount of cash premiums paid in the various departments. Table number four shows the total attendance at the outside gates, day and night grandstand, also the total paid admissions and the admission fees paid.

There is also submitted a tabulation showing receipts from ticket sales; the cost of advertising and the per cent of ticket sales spent for advertising. Another statement gives a list of the fairs receiving County Aid, the amount and purpose for which it was appropriated.

TABLE NO. 1.—RECEIPTS AND DISBURSEMENTS OF

Number	County, City or Town	Receipts					
		Ticket Sales					
		Outside gate	Grandstand	Entry fees speed department	Concessions and privileges	Advertising in premium list and program	State aid
1	Adair, Greenfield	$ 4,776.95	$ 757.65	$ 220.50	$ 750.75	$ 165.60	$ 1,773.63
2	Adams, Corning	2,324.85	615.95	88.00	267.50	152.10	1,967.85
3	Allamakee, Waukon	4,357.05	538.95	----------	889.50	227.50	2,000.00
4	Audubon, Audubon	6,295.65	920.05	----------	1,432.51	----------	1,353.07
5	Benton, Vinton	6,915.50	1,221.95	70.00	1,473.17	532.00	1,874.83
6	Black Hawk, Waterloo	27,323.35	11,396.40	----------	2,838.00	1,086.00	2,000.00
7	Boone, Ogden	2,740.30	369.75	405.00	629.90	----------	896.21
8	Bremer, Waverly	8,367.94	1,743.00	369.00	2,774.46	703.50	2,000.00
9	Buchanan, Aurora	1,416.05	----------	22.10	229.70	552.85	1,689.72
10	Buchanan, Independence	5,384.25	707.75	176.75	1,546.95	1,250.00	2,000.00
11	Buchanan, Jesup	1,704.75	----------	288.95	72.00	----------	1,864.95
12	Buena Vista, Alta	7,164.11	812.00	368.89	1,183.50	----------	2,000.00
13	Butler, Allison	4,264.00	656.25	112.80	752.50	65.00	1,905.45
14	Calhoun, Manson	4,256.55	903.75	75.00	940.00	----------	2,000.00
15	Calhoun, Rockwell City	3,855.50	894.25	863.50	1,394.00	----------	2,000.00
16	Carroll, Carroll	4,521.50	1,053.85	720.00	1,785.95	361.00	1,517.94
17	Carroll, Coon Rapids	----------	----------	----------	----------	----------	584.28
18	Cass, Atlantic	7,622.75	2,848.70	70.00	2,267.00	251.00	2,000.00
19	Cedar, Tipton	6,160.50	1,436.05	475.00	998.20	272.00	1,972.65
20	Cerro Gordo, Mason City	13,709.00	7,653.50	770.00	5,721.84	48.00	2,000.00
21	Chickasaw, Nashua	4,648.78	1,315.76	69.05	973.00	330.50	1,816.56
22	Clay, Spencer	18,763.10	4,991.99	992.50	3,677.50	----------	2,000.00
23	Clayton, Elkader	4,453.30	907.25	20.00	1,019.80	464.00	2,000.00
24	Clayton, National	3,100.00	351.80	----------	303.50	512.50	1,856.90
25	Clayton, Strawberry Point	1,853.75	896.40	----------	505.00	850.50	2,000.00
26	Clinton, De Witt	5,559.97	2,126.25	560.00	1,124.35	741.00	2,000.00
27	Crawford, Arion	4,415.02	783.25	----------	883.76	----------	2,000.00
28	Crawford, Schleswig	----------	----------	----------	518.00	----------	1,057.60
29	Dallas, Perry	2,743.00	707.30	30.00	319.00	151.05	2,000.00
30	Davis, Bloomfield	8,731.50	4,935.45	699.50	2,576.58	326.00	2,000.00
31	Decatur, Leon	**6,405.00**	**3,508.75**	**475.00**	**1,346.43**	219.00	1,817.85
32	Delaware, Manchester	8,206.40	1,804.85	----------	2,021.91	1,056.50	2,000.00
33	Des Moines, Burlington	12,393.72	6,976.50	512.00	2,326.00	528.50	2,000.00
34	Dubuque, Dyersville	3,689.25	----------	----------	980.00	470.40	2,000.00
35	Fayette, West Union	11,002.65	1,770.65	----------	3,364.04	1,025.00	2,000.00
36	Fremont, Hamburg	2,754.44	503.10	----------	610.05	335.50	2,000.00
37	Greene, Jefferson	4,090.25	1,687.75	----------	793.70	291.00	2,000.00
38	Grundy, Grundy Center	3,706.05	609.25	----------	328.50	----------	2,000.00
39	Guthrie, Guthrie Center	5,021.25	----------	130.00	1,239.00	----------	1,245.90
40	Hamilton, Webster City	4,113.25	----------	----------	467.40	700.00	2,000.00
41	Hancock, Britt	4,808.73	643.45	----------	1,245.79	136.00	1,810.65
42	Hardin, Ackley	41.00	----------	----------	----------	----------	400.00
43	Hardin, Eldora	4,710.60	1,100.25	225.00	1,145.15	378.00	2,000.00
44	Harrison, Missouri Valley	3,974.35	646.20	----------	764.22	266.60	2,000.00
45	Henry, Mt. Pleasant	8,674.25	5,434.30	1,005.00	3,412.00	----------	2,000.00
46	Henry, Winfield	3,498.50	1,550.75	820.00	962.05	----------	1,624.20
47	Humboldt, Humboldt	4,762.30	1,695.20	198.50	1,010.92	43.45	1,519.32
48	Ida, Ida Grove	1,895.45	----------	27.00	136.75	----------	1,060.40
49	Jackson, Maquoketa	4,178.49	723.50	433.00	932.60	564.00	1,405.08
50	Jasper, Newton	5,469.39	1,814.05	793.00	1,267.65	302.00	2,000.00
51	Jefferson, Fairfield	8,306.75	3,379.18	650.00	2,270.03	----------	2,000.00
52	Jones, Anamosa	4,999.60	1,700.91	420.00	1,248.44	416.00	1,814.55
53	Jones, Monticello	6,060.75	1,418.25	416.00	1,810.85	720.50	1,743.08
54	Keokuk, What Cheer	2,067.00	683.00	320.00	528.90	----------	1,679.55
55	Kossuth, Algona	8,656.33	1,636.00	637.00	1,694.50	----------	2,000.00
56	Lee, Donnellson	3,472.75	----------	150.00	353.00	598.00	1,306.80
57	Lee, West Paint	3,330.00	427.25	320.00	597.30	692.50	1,992.15
58	Linn, Central City	2,739.54	1,471.10	140.00	901.84	491,00	2,000.00
59	Linn, Marion	4,138.00	1,570.95	490.00	1,084.00	1,078.50	1,951.50
60	Louisa, Columbus Junction	4,291.50	2,353.60	1,000.00	1,290.85	----------	2,000.00
61	Lucas, Derby	1,806.00	----------	----------	103.50	217.00	1,645.65
62	Lyon, Rock Rapids	7,385.14	1,631.90	715.00	1,698.50	831.91	2,000.00
63	Mahaska, Oskaloosa	17,331.61	9,975.50	333.00	3,470.84	430.75	2,000.00

COUNTY AND DISTRICT FAIRS IN IOWA IN 1922.

Receipts		Disbursements						
Miscellaneous receipts of fair	Total receipts of fair	Premiums other than speed	Speed premiums	Music and attractions	Miscellaneous expense of fair	Total expense of fair	+ Profit − Loss	Number
$ 426.28	$ 8,871.36	$ 2,456.05	$ 1,644.00	1,694.00	3,338.24	9,132.29	260.93—	1
734.47	6,150.72	2,779.75	546.50	1,225.00	906.87	5,458.12	692.60+	2
208.25	8,221.25	2,886.50	400.00	2,599.47	1,444.81	7,330.78	890.47+	3
366.51	10,367.79	1,790.10	2,817.50	2,038.50	2,317.15	8,963.25	1,404.54+	4
459.69	12,547.14	2,624.75	1,020.50	2,650.00	4,908.81	11,204.06	1,343.08+	5
16,851.67	61,495.42	16,766.85	----------	6,422.12	20,456.30	43,645.27	17,850.15+	6
1,135.00	6,176.16	1,137.45	1,935.98	1,748.22	757.47	5,579.12	597.04+	7
667.28	16,625.18	5,080.88	2,711.80	3,193.97	4,346.77	15,333.42	1,291.76+	8
217.46	4,127.88	2,316.20	220.09	795.47	1,088.24	4,420.00	292.12—	9
868.50	11,934.20	5,031.55	765.00	3,300.00	3,527.53	12,624.08	689.88—	10
877.43	4,808.08	2,608.25	----------	1,053.90	2,055.91	5,718.06	909.98—	11
866.35	12,394.85	3,271.50	2,333.87	2,777.74	3,553.13	11,936.24	458.61+	12
516.50	8,272.50	2,675.75	504.50	2,098.79	2,624.35	7,903.39	369.11+	13
493.47	8,668.77	3,198.25	1,038.00	1,925.00	1,870.71	8,031.96	636.81+	14
271.00	9,278.25	3,268.21	2,810.38	2,310.00	2,804.53	11,193.12	1,914.87—	15
249.62	10,209.86	2,029.90	2,970.00	1,907.00	2,905.37	9,812.27	397.59+	16
511.50	1,095.78	730.35	----------	----------	321.55	1,051.90	43.88+	17
1,108.16	16,167.61	3,953.45	2,787.00	2,782.55	3,211.38	12,734.38	3,433.23+	18
1,122.50	12,436.90	2,787.75	2,475.00	1,880.00	3,424.26	10,567.01	1,869.89+	19
1,246.73	31,149.07	7,422.10	3,409.00	11,388.50	6,388.08	28,607.68	2,541.39+	20
1,657.30	10,810.95	2,527.60	758.50	2,448.97	2,671.53	8,406.60	2,404.35+	21
928.50	31,353.59	6,714.95	4,627.50	3,854.74	7,002.38	22,199.57	9,154.02+	22
700.64	9,564.99	2,917.75	1,125.00	3,107.50	1,969.58	9,119.83	445.16+	23
585.25	6,709.95	2,594.85	----------	1,629.50	1,576.35	5,800.70	909.25+	24
806.04	6,911.69	3,110.25	550.00	1,783.75	1,283.08	6,727.08	184.61+	25
1,252.98	13,364.55	3,386.65	2,818.00	2,428.41	4,822.19	13,455.25	90.70—	26
1,247.15	9,329.18	3,406.05	1,100.00	1,825.00	825.00	7,156.05	2,173.13+	27
3,497.92	5,073.52	1,368.00	----------	1,734.90	1,404.10	4,507.00	566.52+	28
1,799.50	7,749.85	3,649.65	704.00	2,150.00	1,266.02	7,769.67	19.82—	29
2,423.53	21,692.56	3,100.30	4,715.00	3,980.00	4,334.46	16,129.76	5,562.80+	30
2,698.00	16,470.03	2,529.75	3,417.50	4,547.20	3,910.26	14,404.71	2,065.32+	31
3,450.32	18,539.98	4,533.30	1,484.50	4,440.00	4,298.27	14,756.07	3,783.91+	32
5,096.40	29,833.12	6,858.50	5,384.65	5,458.96	9,525.67	27,227.78	2,605.34+	33
1,342.95	8,482.60	2,936.55	----------	1,431.48	2,445.86	6,813.89	1,668.71+	34
593.35	19,755.69	3,645.45	1,613.38	4,227.56	3,700.47	13,186.86	6,568.83+	35
1,167.50	7,370.59	3,417.05	----------	2,951.16	2,637.61	9,005.82	1,635.23—	36
879.00	9,741.70	2,957.00	541.50	2,969.50	2,272.07	8,740.07	1,001.63+	37
830.50	7,474.30	3,498.05	260.00	1,525.00	2,480.43	7,763.48	289.18—	38
467.45	8,103.60	1,637.00	1,498.00	1,192.00	2,433.43	6,760.43	1,343.17+	39
754.48	8,035.13	3,597.52	----------	2,372.75	2,091.31	8,061.58	26.45—	40
806.59	9,451.21	2,517.75	1,580.00	1,742.90	2,689.12	8,529.77	921.44+	41
456.00	897.00	500.00	----------	----------	305.05	805.05	91.95+	42
1,651.06	11,210.06	3,904.45	1,670.50	2,798.00	2,034.68	10,407.63	802.43+	43
462.25	8,113.62	2,906.85	1,479.50	1,691.39	3,406.07	9,483.81	1,370.19—	44
2,468.13	22,993.68	5,076.60	5,102.00	4,337.50	6,178.95	20,695.05	2,298.63+	45
1,023.09	9,478.59	2,207.00	3,053.00	2,233.75	1,432.03	8,925.78	552.81+	46
90.13	9,319.82	2,032.20	2,381.25	2,482.00	1,404.00	8,299.45	1,020.37+	47
1,544.98	4,664.58	1,372.00	112.50	1,492.10	1,541.87	4,518.47	146.11+	48
1,565.90	9,802.57	1,864.40	1,985.00	1,950.00	2,417.50	8,216.90	1,585.67+	49
3,051.64	14,697.73	2,998.05	3,193.00	3,691.20	3,413.50	13,295.75	1,401.98+	50
1,206.50	17,812.46	3,002.00	4,600.00	2,835.00	6,140.00	16,577.00	1,235.46+	51
499.05	11,098.55	2,524.25	1,435.00	2,485.00	1,919.52	8,363.77	2,734.78+	52
875.63	13,045.06	2,405.13	2,158.75	3,250.50	3,219.87	11,034.25	2,010.81+	53
400.70	5,679.15	2,299.25	2,485.50	750.00	218.80	5,753.55	74.40—	54
3,898.50	18,522.33	3,225.85	3,167.33	3,425.00	3,968.60	13,786.78	4,735.55+	55
1,494.75	7,375.30	1,724.00	960.00	1,462.46	1,387.63	5,534.09	1,841.21+	56
1,511.25	8,870.45	2,820.25	1,816.75	3,009.25	1,257.28	8,903.53	33.08—	57
4,399.73	12,143.21	4,102 35	833.00	3,935.00	3,833.55	12,703.90	560.69—	58
3,227.34	13,540.29	2,752.50	2,515.00	2,215.00	4,237.68	11,720.18	1,820.11+	59
1,203.85	12,139.80	3,907.10	4,076.75	3,051.75	1,829.62	12,865.22	725.42—	60
514.65	4,286.80	2,242.75	----------	769.63	1,267.04	4,279.42	7.38+	61
788.20	15,050.65	3,284.00	4,445.00	2,760.00	4,699.07	15,188.07	137.42—	62
2,500.94	36,042.64	7,479.00	4,462.00	7,271.96	10,141.14	29,354.10	6,688.54+	63

TABLE NO.

Number	County, City or Town	Receipts					
		Ticket Sales		Entry fees speed department	Concessions and privileges	Advertising in premium list and program	State aid
		Outside gate	Grandstand				
64	Marion, Knoxville	6,735.38	2,292.34	1,169.00	1,335.89	861.90	2,000.00
65	Marshall, Marshalltown (Fair)	12,791.00	3,581.00	1,017.00	2,853.45	----------	2,000.00
66	Marshall, Marshalltown (Cong.)	----------	----------	----------	35.00	445.00	1,617.60
67	Mills, Malvern	7,000.00	1,509.67	472.50	1,271.90	----------	1,842.90
68	Mitchell, Osage	5,058.00	665.00	370.00	843.96	200.00	1,491.14
69	Monona, Onawa	1,860.60	467.85	----------	328.63	248.00	1,197.42
70	Monroe, Albia	6,359.15	1,309.45	14.00	1,139.00	430.00	1,957.95
71	Muscatine, West Liberty	8,720.00	2,060.50	840.50	1,848.00	178.50	2,000.00
72	O'Brien, Sheldon	7,074.25	1,035.75	525.00	1,736.50	96.20	2,000.00
73	Page, Clarinda	7,417.65	2,716.55	----------	1,455.15	130.00	2,000.00
74	Page, Shenandoah	6,397.90	856.65	----------	1,700.77	----------	2,000.00
75	Plymouth, Le Mars	2,141.45	----------	----------	178.85	435.00	993.02
76	Pocahontas, Fonda	2,239.32	----------	365.00	1,231.90	----------	1,951.59
77	Pottawattamie, Avoca	3,428.00	804.70	380.00	853.89	----------	2,000.00
78	Poweshiek, Brooklyn	----------	----------	----------	----------	----------	989.00
79	Poweshiek, Malcom	376.25	10.25	----------	113.90	168.00	866.53
80	Sac, Sac City	5,290.00	1,905.00	579.50	1,023.00	172.00	2,000.00
81	Scott, Davenport	32,497.70	23,294.75	2,759.00	8,469.55	1,465.25	2,000.00
82	Shelby, Harlan	5,893.50	1,517.55	----------	1,553.53	----------	2,000.00
83	Sioux, Orange City	3,822.04	330.40	320.00	1,029.89	729.00	1,157.45
84	Story, Ames	2,038.20	53.50	----------	409.67	----------	2,000.00
85	Tama, Toledo	4,169.10	829.70	808.00	1,082.92	----------	2,000.00
86	Taylor, Bedford	8,044.14	1,473.50	534.64	1,405.82	99.20	1,451.56
87	Van Buren, Keosauqua	1,215.75	----------	----------	201.00	158.50	1,047.38
88	Wapello, Eldon	5,082.30	616.00	450.00	1,146.86	146.40	1,477.60
89	Warren, Indianola	3,169.10	3,371.11	----------	1,367.38	----------	2,000.00
90	Wayne, Corydon	8,501.26	2,352.78	490.00	1,645.75	520.00	2,000.00
91	Webster, Fort Dodge	10,789.75	9,177.00	727.44	3,195.09	75.00	2,000.00
92	Winnebago, Forest City	3,873.00	1,350.45	----------	1,010.50	968.70	1,839.87
93	Winneshiek, Decorah	7,864.32	852.30	550.00	2,936.76	----------	2,000.00
94	Woodbury, Sioux City	28,873.50	15,521.50	1,570.00	13,426.31	1,586.00	2,000.00
95	Worth, Northwood	2,105.85	144.70	----------	231.00	----------	1,033.00
	Totals 1922 (95 Fairs)	$ 566,237.72	$ 188.361.39	$31,617.62	$ 138,316.45	$29,946.86	$ 168,062.33
	Totals 1921 (92 Fairs)	$ 555,322.18	$ 187,215.42	$37,976.47	$ 130,755.54	$30,290.63	$ 157,690.90
	Totals 1920 (95 Fairs)	$ 699,434.82	$ 235,512.76	$38,610.63	$ 157,483.50	$37,186.51	$ 113,013.24
	Totals 1919 (93 Fairs)	$ 567,273.53	$ 143,263.03	$28,599.29	$ 111,695.16	$24,865.20	$ 90,508.50
	Totals 1918 (89 Fairs)	$ 382,947.45	$ 74,666.01	$42,755.30	$ 64,419.02	----------	$ 51,048.36
	Totals 1917 (93 Fairs)	$ 435,182.48	$ 87,948.12	$45,179.93	$ 80,282.03	----------	$ 54,817.24
	Totals 1916 (99 Fairs)	$ 382,555.23	$ 77,470.19	$47,204.11	$ 71,984.26	----------	$ 56,870.67
	Totals 1915 (93 Fairs)	$ 308,720.82	$ 56,650.00	$37,242.95	$ 58,592.11	----------	$ 48,085.98

I—Continued.

Receipts		Disbursements						
Miscellaneous receipts of fair	Total receipts of fair	Premiums other than speed	Speed premiums	Music and attractions	Miscellaneous expense of fair	Total expense of fair	+ Profit − Loss	Number
3,289.86	17,684.37	4,200.80	4,018.60	2,907.00	5,545.74	16,672.14	1,012.23+	64
1,005.65	23,248.10	5,352.05	5,376.40	4,551.90	8,618.41	23,898.76	650.66—	65
819.00	2,916.60	2,196.00	------------	------------	792.25	2,988.25	71.65—	66
515.70	12,612.67	2,571.50	3,097.50	3,348.50	1,954.96	10,972.46	1,640.21+	67
328.90	8,957.00	1,987.35	1,891.00	1,993.00	2,304.50	8,175.85	781.15+	68
243.00	4,345.50	1,567.75	745.00	924.05	1,046.04	4,282.84	62.66+	69
1,387.70	12,597.25	2,763.25	2,284.00	2,411.25	2,031.29	9,489.79	3,107.46+	70
1,569.07	17,216.57	6,419.25	4,375.55	3,091.46	2,238.82	16,125.08	1,091.49+	71
456.10	12,923.80	2,986.50	3,522.75	2,830.00	3,626.93	12,966.18	42.38—	72
3,338.72	17,058.07	3,685.45	1,510.00	6,140.00	4,239.46	15,574.91	1,483.16+	73
1,443.47	12,398.79	5,005.10	1,035.00	4,412.50	3,498.85	13,951.45	1,552.66—	74
1,793.41	5,541.73	1,275.75	------------	1,320.00	2,945.98	5,541.73	------------	75
60.00	5,847.81	2,752.65	985.00	1,768.00	1,836.25	7,341.90	1,494.09—	76
980.02	8,446.61	3,161.85	2,152.50	1,775.00	1,910.26	8,999.61	553.00—	77
730.95	1,719.95	1,270.00	------------	200.00	186.97	1,656.97	62.98+	78
846.02	2,380.95	1,095.10	------------	459.00	642.07	2,196.17	184.78+	79
2,867.40	13,836.90	3,224.05	2,759.28	2,923.00	3,261.25	12,167.58	1,669.32+	80
10,981.58	81,467.83	12,922.80	13,813.91	15,833.53	40,415.29	82,985.53	1,517.70—	81
2,891.91	13,856.49	2,872.40	2,930.00	2,800.00	2,285.34	10,887.74	2,968.75+	82
184.85	7,573.63	1,510.65	2,300.00	1,770.00	2,244.72	7,825.37	251.74—	83
1,564.50	6,065.87	2,866.80	190.00	1,996.10	1,150.73	6,113.63	47.76—	84
959.79	9,849.51	3,174.50	3,570.75	1,274.00	3,988.90	12,008.15	2,158.64—	85
75.00	13,083.86	1,930.80	3,284.66	3,449.16	3,285.29	11,949.91	1,133.95+	86
326.95	2,949.58	1,353.40	------------	393.00	836.44	2,582.84	366.74+	87
230.94	9,200.10	1,968.00	2,591.41	1.806.46	1,861.47	8,227.34	972.76+	88
224.25	10,131.84	2,929.75	1,188.00	2,594.24	1,305.61	8,017.60	2,114.24+	89
664.77	16,174.56	3,790.95	4,086.28	2,722.97	3,162.83	13,763.03	2,411.53+	90
1,646.00	27,610.28	5,571.50	4,127.91	10,235.07	13,141.73	33,076.21	5,465.93—	91
585.80	9,628.32	2,566.45	1,047.00	2,146.00	1,507.13	7,266.58	2,361.74+	92
582.50	14,785.88	3,207.00	2,050.00	2,985.00	3,198.60	11,440.60	3,345.28+	93
10,065.69	73,043.00	13,355.85	8,124.49	14,945.00	32,307.11	68,732.45	4,310.55+	94
484.00	3,998.55	1,332.90	------------	1,087.59	666.87	3,087.36	911.19+	95
150,211.49	$ 1,272,753.86	$ 323,217.69	$ 197,465.47	$ 276,580.78	$ 362,182.19	$ 1,159,446.13	$ 136,144.30+ $ 22,836.57—	
176,550.90	$ 1,275,802.04	$ 299,380.79	$ 216,742.83	$ 317,923.38	$ 389,025.66	$ 1,223,072.66	$ 108,234.87+ 55,505.49—	
143,224.76	$ 1,417,604.46	$ 243,702.97	$ 218,592.11	$ 328,703.97	$ 424,032.41	$ 1,215,161.47	$ 219,922.31+ 17,479.32—	
88,885.40	$ 1,055,089.14	$ 174,633.07	$ 176,905.35	$ 252,546.57	$ 269,183.01	$ 873,268.00	$ 199,680.55+ 17,859.41—	
73,532.88	$ 689,469.02	$ 129,306.75	$ 146,034.34	$ 161,763.18	$ 214,838.45	$ 651,942.72	$ 65,493.09+ 27,966.79—	
59,797.89	$ 763,207.69	$ 137,226.48	$ 148,359.47	$ 159,441.51	$ 206,611.35	$ 651,638.81	$ 122,791.34+ 11,222.46—	
67,259.95	$ 703,344.41	$ 144,703.25	$ 149,285.42	$ 151,242.79	$ 181.638.68	$ 626,870.14	$ 93,132.24+ 16,657.97—	
55,643.78	$ 564,935.64	$ 117,439.10	$ 127,951.22	$ 115,227.34	$ 160,982.24	$ 521,599.90	$ 62,230.80+ 18,895.06—	

TABLE NO. 2.—FINANCIAL STATEMENT OF COUNTY

Number	County, City or Town	Balance on hand	Receipts: Receipts of fair	Receipts: Receipts from sources other than fair	Receipts: Total receipts	Expense of fair
1	Adair, Greenfield	$ 386.27	$ 8,871.36	----------	$ 9,257.63	$ 9,132.29
2	Adams, Corning	----------	6,150.72	----------	6,150.72	5,458.12
3	Allamakee, Waukon	88.69	8,221.25	2,019.47	10,329.41	7,330.78
4	Audubon, Audubon	1,392.61	10,367.79	----------	11,760.40	8,963.25
5	Benton, Vinton	2,601.67	12,547.14	3,610.05	18,758.86	11,204.06
6	Black Hawk, Waterloo	16,114.15	61,495.42	4,787.48	82,397.05	43,645.27
7	Boone, Ogden	----------	6,176.16	452.27	6,628.43	5,579.12
8	Bremer, Waverly	163.30	16,625.18	677.00	17,465.48	15,333.42
9	Buchanan, Aurora	870.23	4,127.88	2,210.00	7,208.11	4,420.00
10	Buchanan, Independence	2,606.35	11,934.20	----------	14,540.55	12,624.08
11	Buchanan, Jesup	81.35	4,808.08	1,186.55	6,075.98	5,718.06
12	Buena Vista, Alta	306.09	12,394.85	7,610.00	20,310.94	11,936.24
13	Butler, Allison	444.78	8,272.50	2,500.00	11,217.28	7,903.39
14	Calhoun, Manson	13.56	8,668.77	----------	8,682.33	8,031.96
15	Calhoun, Rockwell City	2,326.99	9,278.25	4,200.00	15,805.24	11,193.12
16	Carroll, Carroll	1,204.20	10,209.86	1,356.78	12,770.84	9,812.27
17	Carroll, Coon Rapids	59.50	1,095.78	----------	1,155.28	1,051.90
18	Cass, Atlantic	61.81	16,167.61	500.00	16,729.42	12,734.38
19	Cedar, Tipton	300.26	12,436.90	175.00	12,912.16	10,567.01
20	Cerro Gordo, Mason City	1,879.46	31,149.07	1,764.55	34,793.08	28,607.68
21	Chickasaw, Nashua	410.67	10,810.95	----------	11,221.62	8,406.60
22	Clay, Spencer	1,515.86	31,353.59	3,105.60	35,975.05	22,199.57
23	Clayton, Elkader	----------	9,564.99	5,547.92	15,112.91	9,119.83
24	Clayton, National	484.32	6,709.95	2,150.00	9,344.27	5,800.70
25	Clayton, Strawberry Pt.	----------	6,911.69	106.10	7,017.79	6,727.08
26	Clinton, De Witt	92.32	13,364.55	1,090.13	14,547.00	13,455.25
27	Crawford, Arion	----------	9,329.18	2,700.00	12,029.18	7,156.05
28	Crawford, Schleswig	----------	5,073.52	----------	5,073.52	4,507.00
29	Dallas, Perry	----------	7,749.85	1,593.63	9,343.48	7,769.67
30	Davis, Bloomfield	1,022.72	21,692.56	----------	22,715.28	16,129.76
31	Decatur, Leon	----------	16,470.03	9,550.37	26,020.40	14,404.71
32	Delaware, Manchester	1,821.74	18,539.98	14,380.11	34,741.83	14,756.07
33	Des Moines, Burlington	----------	29,833.12	----------	29,833.12	27,227.78
34	Dubuque, Dyersville	449.34	8,482.60	50.00	8,981.94	6,813.89
35	Fayette, West Union	522.35	19,755.69	2,586.79	22,864.83	13,186.86
36	Fremont, Hamburg	----------	7,370.59	----------	7,370.59	9,005.82
37	Greene, Jefferson	1,917.67	9,741.70	----------	11,659.37	8,740.07
38	Grundy, Grundy Center	1,819.12	7,474.30	1,509.15	10,802.57	7,763.48
39	Guthrie, Guthrie Center	1,170.67	8,103.60	----------	9,274.27	6,760.43
40	Hamilton, Webster City	2,222.29	8,035.13	2,000.00	12,257.42	8,061.58
41	Hancock, Britt	----------	9,451.21	247.50	9,698.71	8,529.77
42	Hardin, Ackley	420.45	897.00	----------	1,317.45	805.05
43	Hardin, Eldora	1,837.58	11,210.06	3,400.00	16,447.64	10,407.63
44	Harrison, Missouri Valley	576.97	8,113.62	3,180.00	11,870.59	9,483.81
45	Henry, Mt. Pleasant	296.61	22,993.68	2,300.00	25,590.29	20,695.05
46	Henry, Winfield	7.26	9,478.59	----------	9,485.85	8,925.78
47	Humboldt, Humboldt	----------	9,319.82	1,079.21	10,399.03	8,299.45
48	Ida, Ida Grove	19.37	4,664 58	----------	4,683.95	4,518.47
49	Jackson, Maquoketa	1,247.98	9,802.57	3,100.00	14,150.55	8,216.90
50	Jasper, Newton	824.64	14,697.73	----------	15,522.37	13,295.75
51	Jefferson, Fairfield	115.00	17,812.46	4,107.01	22,034.47	16,577.00
52	Jones, Anamosa	----------	11,098.55	665.00	11,763.55	8,363.77
53	Jones, Monticello	752.08	13,045.06	1,089.58	14,886.72	11,034.25
54	Keokuk, What Cheer	----------	5,679.15	----------	5,679.15	5,753.55
55	Kossuth, Algona	----------	18,522.33	1,200.00	19,722.33	13,786.78
56	Lee, Donnellson	224.87	7,375.30	----------	7,600.17	5,534.09
57	Lee, West Point	----------	8,870.45	857.31	9,727.76	8,903.53
58	Linn, Central City	2,291.28	12,143.21	----------	14,434.49	12,703.90
59	Linn, Marion	93.99	13,540.29	525.00	14,159.28	11,720.18
60	Louisa, Columbus Jct.	----------	12,139.80	5,527.65	17,667.45	12,865.22
61	Lucas, Derby	390.11	4,286.80	1,100.00	5,776.91	4,279.42
62	Lyon, Rock Rapids	2,762.64	15,050.65	----------	17,813.29	15,188.07
63	Mahaska, Oskaloosa	4,777.32	36,042.64	3,945.24	44,765.20	29,354.10

AND DISTRICT FAIRS RECEIVING STATE AID IN 1922.

Disbursements			Balance or Overdraft		Assets and Liabilities		
Indebtedness of previous years paid	Insurance, improvements, repairs, etc., 1922	Total disbursements	Balance Nov. 1, 1922	Overdraft Nov. 1, 1922	Value of grounds and buildings	Present indebtedness	Number
------------	$ 157.25	$ 9,289.54	------------	$ 31.91	$ 12,000.00	$ 1,000.00	1
------------	692.60	6,150.72	------------	------------	15,000.00	1,200.00	2
------------	2,998.63	10,329.41	------------	------------	12,000.00	------------	3
$ 1,290.00	636.05	10,889.30	$ 871.10	------------	10,000.00	3,200.00	4
2,468.73	2,327.39	16,000.18	2,758.68	------------	25,000.00	14,202.00	5
10,216.96	8,085.42	61,947.65	20,449.40	------------	139,000.00	41,000.00	6
1,177.82	529.10	7,286.04	------------	657.61	15,000.00	9,185.70	7
564.09	1,061.02	16,958.53	506.95	------------	20,000.00	4,200.00	8
800.00	1,039.96	6,259.96	948.15	------------	3,500.00	2,200.00	9
------------	------------	12,624.08	1,916.47	------------	25,000.00	7,000.00	10
151.60	70.72	5,940.38	135.60	------------	215,000.00	------------	11
6,552.86	1,766.74	20,255.84	55.10	------------	35,000.00	6,600.00	12
2,000.00	237.24	10,140.63	1,076.65	------------	8,800.00	2,500.00	13
574.20	496.79	9,102.95	------------	420.62	25,264.28	10,716.95	14
2,000.00	600.88	13,794.00	2,011.24	------------	40,000.00	5,800.00	15
------------	2,621.17	12,433.44	337.40	------------	18,500.00	10,800.00	16
------------	------------	1,051.90	103.38	------------	------------	------------	17
------------	1,270.07	14,004.45	2,724.97	------------	50,000.00	6,150.00	18
------------	2,210.65	12,777.66	134.50	------------	40,000.00	10,500.00	19
710.95	4,640.97	33,959.60	833.48	------------	43,507.68	15,500.00	20
------------	2,746.39	11,152.99	68.63	------------	25,000.0	------------	21
6,649.46	2,698.69	31,547.72	4,427.33	------------	110,000.0	12,092.00	22
4,087.79	2,149.64	15,357.26	------------	244.35	20,000.0	5,000.00	23
------------	2,936.00	8,736.70	607.57	------------	12,500.0	4,150.00	24
------------	60.30	6,787.38	230.41	------------	12,000.0	8,000.00	25
419.84	671.91	14,547.00	------------	------------	20,000.0	6,390.00	26
------------	4,873.13	12,029.18	------------	------------	9,000.0	500.00	27
------------	------------	4,507.00	566.52	------------	275.0	------------	28
1,006.43	766.77	9,542.87	------------	199.39	60,000.0	17,000.00	29
1,000.00	1,214.69	18,344.45	4,370.83	------------	40,000.0	7,220.00	30
6,809.49	4,622.89	25,837.09	183.31	------------	80,000.0	40,166.66	31
347.09	18,370.52	33,473.68	1,268.15	------------	55,000.0	10,000.00	32
780.45	1,711.27	29,719.50	113.62	------------	75,000.0	43,240.00	33
202.76	1,406.40	8,423.05	558.89	------------	30,000.0	12,000.00	34
------------	3,301.55	16,488.41	6,376.42	------------	75,000.0	------------	35
------------	1,303.38	10,309.20	------------	2,938.61	17,000.0	7,603.64	36
461.00	1,010.90	10,211.97	1,447.40	------------	25,000.0	5,000.00	37
2,616.78	422.31	10,802.57	------------	------------	12,000.0	3,886.36	38
1,000.00	597.01	8,357.44	916.83	------------	27,500.0	3,500.00	39
------------	3,171.95	11,233.53	1,023.89	------------	29,000.00	------------	40
100.00	1,000.19	9,629.96	68.75	------------	20,000.00	6,868.54	41
------------	------------	805.05	512.40	------------	------------	150.00	42
4,220.88	1,933.91	16,562.42	------------	114.78	30,000.00	6,200.00	43
680.00	1,811.92	11,975.73	------------	105.14	50,000.00	3,180.00	44
682.27	4,016.36	25,393.68	196.61	------------	60,000.00	6,300.00	45
------------	493.20	9,418.98	66.87	------------	20,000.00	8,624.95	46
------------	1,014.00	9,313.45	1,085.58	------------	40,000.00	7,850.00	47
------------	------------	4,518.47	165.48	------------	------------	------------	48
1,132.86	2,203.00	11,552.76	2,597.79	------------	20,000.00	6,000.00	49
200.00	3,659.38	17,155.13	------------	1,632.76	50,000.00	7,000.00	50
2,000.00	3,375.00	21,952.00	82.47	------------	35,000.00	29,150.00	51
525.00	1,560.02	10,448.79	1,314.76	------------	35,000.00	12,000.00	52
426.00	2,099.03	13,559.28	1,327.44	------------	31,000.00	5,774.00	53
------------	416.18	6,169.73	------------	490.58	20,000.00	3,700.00	54
1,517.78	6,271.63	21,576.19	------------	1,853.86	50,000.00	1,200.00	55
200.00	2,059.70	7,793.79	------------	193.62	8,000.00	200.00	56
------------	808.03	9,711.56	16.20	------------	11,000.00	7,820.00	57
------------	1,730.59	14,434.49	------------	------------	16,000.00	9,000.00	58
------------	1,458.20	13,178.38	980.90	------------	20,000.00	8,722.14	59
------------	7,628.23	20,493.45	------------	2,826.00	20,000.00	10,000.00	60
------------	1,195.11	5,474.53	302.38	------------	6,000.00	3,500.00	61
------------	1,660.27	16,848.34	964.95	------------	50,000.00	------------	62
------------	7,061.54	36,415.64	8,349.56	------------	150,000.00	42,000.00	63

TABLE NO.

Number	County, City or Town	Balance on hand	Receipts			
			Receipts of fair	Receipts from sources other than fair	Total receipts	Expense of fair
64	Marion, Knoxville	842.79	17,684.37	500.00	19,027.16	16,672.14
65	Marshall, Mar'llt'n (Fair)	2,239.98	23,248.10	4,229.00	29,717.08	23,898.76
66	Marshall, Mar'llt'n (Con.)	1,591.94	2,916.60	1,875.00	6,383.54	2,988.25
67	Mills, Malvern	475.10	12,612.67	1,301.50	14,389.27	10,972.46
68	Mitchell, Osage	286.66	8,957.00	200.00	9,443.66	8,175.85
69	Monona, Onawa	178.64	4,345.50	266.74	4,790.88	4,282.84
70	Monroe, Albia	290.38	12,597.25	1,770.00	14,657.63	9,489.79
71	Muscatine, West Liberty	1,618.33	17,216.57	4,253.51	23,088.41	16,125.08
72	O'Brien, Sheldon	----------	12,923.80	81.75	13,005.55	12,966.18
73	Page, Clarinda	2,915.91	17,058.07	3,143.83	23,117.81	15,574.91
74	Page, Shenandoah	1,213.15	12,398.79	18,746.75	32,358.69	13,951.45
75	Plymouth, LeMars	----------	5,541.73	----------	5,541.73	5,541.73
76	Pocahontas, Fonda	286.56	5,847.81	----------	6,134.37	7,341.90
77	Pottawattamie, Avoca	525.71	8,446.61	9,875.45	18,847.77	8,999.61
78	Poweshiek, Brooklyn	.15	1,719.95	34.11	1,754.21	1,656.97
79	Poweshiek, Malcom	290.94	2,380.95	----------	2,671.89	2,196.17
80	Sac, Sac City	2,130.10	13,836.90	200.00	16,167.00	12,167.58
81	Scott, Davenport	1,279.04	81,467.83	23,711.43	106,458.30	82,985.53
82	Shelby, Harlan	2,329.51	13,856.49	----------	16,186.00	10,887.74
83	Sioux, Orange City	----------	7,573.63	422.45	7,996.08	7,825.37
84	Story, Ames	----------	6,065.87	2,761.52	8,827.39	6,113.63
85	Tama, Toledo	834.69	9,849.51	4,700.00	15,384.20	12,008.15
86	Taylor, Bedford	2,733.52	13,083.86	608.61	16,425.99	11,949.91
87	Van Buren, Keosauqua	----------	2,949.58	1,950.00	4,899.58	2,582.84
88	Wapello, Eldon	----------	9,200.10	11,475.00	20,675.10	8,227.34
89	Warren, Indianola	588.14	10,131.84	1,274.44	11,994.42	8,017.60
90	Wayne, Corydon	----------	16,174.56	2,571.75	18,746.31	13,763.03
91	Webster, Fort Dodge	----------	27,610.28	15,407.02	43,017.30	33,076.21
92	Winnebago, Forest City	767.93	9,628.32	985.36	11,381.61	7,266.58
93	Winneshiek, Decorah	6.52	14,785.88	947.50	15,739.90	11,440.60
94	Woodbury, Sioux City	----------	73,043.00	32,592.35	105,563.35	68,732.45
95	Worth, Northwood	1,276.18	3,998.55	----------	5,274.73	3,087.36
	Totals 1922 (95 Fairs)	$ 85,690.36	$1,272,753.86	$257,627.52	$1,616,071.74	$1,159,446.13
	Totals 1921 (92 Fairs)	$130,191.35	$1,275,802.04	$247,559.48	$1,653,552.87	$1,223,072.66
	Totals 1920 (95 Fairs)	$148,868.66	$1,417,604.46	$662,613.45	$2,229,024.33	$1,215,161.47
	Totals 1919 (93 Fairs)	$ 65,144.96	$1,055,089.14	$230,507.56	$1,350,741.66	$ 873,268.00
	Totals 1918 (89 Fairs)	$ 73,010.80	$ 689,469.02	$112,233.60	$ 874,713.42	$ 651,942.72
	Totals 1917 (93 Fairs)	$ 51,620.20	$ 763,207.69	$182,706.77	$ 942,717.42	$ 651,638.81
	Totals 1916 (99 Fairs)	$ 48,355.73	$ 703,344.41	$194,738.86	$ 889,568.33	$ 626,870.14
	Totals 1915 (93 Fairs)	$ 36,480.71	$ 564,935.64	$188,684.12	$ 742,014.00	$ 521,599.90

2—Continued.

Disbursements			Balance or Overdraft		Assets and Liabilities		
Indebtedness of previous years paid	Insurance, improvements, repairs, etc., 1921	Total disbursements	Balance Nov. 1, 1922	Overdraft Nov. 1, 1922	Value of grounds and buildings	Present indebtedness	Number
1,855.02	500.00	19,027.16	------------	------------	55,000.00	32,454.03	64
------------	4,129.49	28,028.25	1,688.83	------------	66,000.00	5,000.00	65
1,200.00	50.00	4,238.25	2,145.29	------------	------------	------------	66
1,143.65	1,835.63	13,951.74	437.53	------------	35,000.00	9,500.00	67
------------	840.02	9,015.87	427.79	------------	21,000.00	2,100.00	68
------------	298.90	4,581.74	209.14	------------	18,000.00	5,000.00	69
2,133.60	1,114.32	12,737.71	1,919.92	------------	5,500.00	3,200.00	70
2,163.79	2,799.54	21,088.41	2,000.00	------------	24,000.00	4,217.67	71
213.15	773.83	13,953.16	------------	947.61	50,000.00	11,592.78	72
2,600.00	2,148.70	20,323.61	2,794.20	------------	11,000.00	3,143.83	73
14,784.75	1,325.76	30,061.96	2,296.73	------------	18,000.00	9,536.75	74
------------	------------	5,541.73	------------	------------	------------	------------	75
------------	8,775.00	16,116.90	------------	9,982.53	25,000.00	10,000.00	76
8,050.00	1,547.10	18,596.71	251.06	------------	20,000.00	7,050.00	77
------------	------------	1,656.97	97.24	------------	10,000.00	4,000.00	78
------------	265.08	2,461.25	210.64	------------	10,000.00	5,500.00	79
1,350.00	615.84	14,133.42	2,033.58	------------	25,000.00	10,900.00	80
8,036.61	13,774.96	104,797.10	1,661.20	------------	515,118.64	305,230.63	81
766.75	2,192.30	13,846.79	2,339.21	------------	20,000.00	------------	82
200.00	237.25	8,262.62	------------	266.54	15,000.00	7,625.00	83
2,224.67	920.20	9,258.50	------------	431.11	5,000.00	3,800.00	84
------------	3,595.72	15,603.87	------------	219.67	25,000.00	11,500.00	85
------------	1,334.84	13,284.75	3,141.21	------------	13,000.00	------------	86
------------	186.00	2,768.84	2,130.74	------------	180.00	1,500.00	87
------------	10,899.07	19,126.41	1,548.69	------------	15,000.00	1,800.00	88
988.14	1,491.20	10,496.94	1,497.48	------------	25,000.00	7,390.40	89
3,298.69	510.40	17,572.12	1,174.19	------------	40,000.00	9,504.02	90
------------	9,941.09	43,017.30	------------	------------	300,000.00	127,442.01	91
1,471.84	2,643.19	11,381.61	------------	------------	16,000.00	7,196.52	92
1,147.50	3,088.39	15,676.49	63.41	------------	25,000.00	4,400.00	93
28,821.03	16,489.78	114,043.26	------------	8,407.91	250,000.00	------------	94
------------	1,544.40	4,631.76	642.97	------------	10,000.00	------------	95
$ 148,022.28	$ 234,801.84	$1,542,270.25	$ 105,766.09	$ 31,964.60	$ 3,896,645.60	$ 1,133,326.58	
$ 106,042.12	$ 286,033.04	$1,615,148.22	$ 88,755.98	$ 50,351.33	$ 4,009,734.58	$ 1,076,848.45	
$ 85,518.32	$ 780,968.36	$2,087,978.15	$ 162,332.03	$ 21,285.85	$ 4,514,599.19	$ 901,367.79	
$ 78,517.22	$ 236,534.13	$1,188,319.35	$ 168,859.40	$ 6,437.09	$ 2,707,269.95	$ 459,163.99	
$ 36,761.22	$ 121,950.89	$ 810,654.83	$ 83,904.10	$ 19,845.57	$ 1,906,203.86	$ 326,280.74	
$ 85,592.90	$ 96,464.95	$ 833,696.66	$ 114,718.13	$ 5,697.37	$ 1,629,082.99	$ 320,743.84	
$ 71,687.90	$ 138,269.99	$ 836,828.03	$ 74,341.91	$ 21,601.61	$ 1,588,885.00	$ 261,155.40	
$ 39,156.93	$ 102,102.92	$ 688,291.21	$ 63,491.98	$ 9,769.19	$ 988,128.44	$ 267,299.26	

TABLE NO. 3—TOTAL NUMBER OF EXHIBITORS, NUMBER EXHIBITORS SHEEP AND POULTRY ON EXHIBITION AND

Number	County, City or Town	Number of exhibitors	Number of exhibitors in live stock departments	Horses		Cattle		Swine	
				Number exhibited	Premiums paid	Number exhibited	Premiums paid	Number exhibited	Premiums paid
1	Adair, Greenfield	330	51	70	$ 292.50	46	$ 360.00	351	$ 556.50
2	Adams, Corning	244	118	57	177.00	96	596.50	113	565.00
3	Allamakee, Waukon	736	76	29	105.00	149	893.00	270	762.00
4	Audubon, Audubon	275	65	42	350.00	68	576.00	280	296.00
5	Benton, Vinton	288	108	32	428.00	115	820.00	385	594.00
6	Black Hawk, Waterloo	841	233	271	5,264.10	607	9,489.59	------	----------
7	Boone, Ogden	125	12	40	207.00	46	159.00	67	455.00
8	Bremer, Waverly	674	105	114	707.50	246	2,158.48	281	939.25
9	Buchanan, Aurora	421	80	37	108.00	106	713.00	248	540.50
10	Buchanan, Independence	329	104	75	402.00	365	2,278.00	615	1,495.00
11	Buchanan, Jesup	269	136	71	227.00	238	1,017.00	281	659.00
12	Buena Vista, Alta	263	116	26	75.50	138	795.00	837	1,399.00
13	Butler, Allison	329	41	42	186.50	103	1,035.00	243	455.00
14	Calhoun, Manson	301	61	52	247.50	151	1,136.00	631	888.50
15	Calhoun, Rockwell City	218	79	80	347.00	166	1,096.00	561	850.00
16	Carroll, Carroll	641	201	8	43.00	73	811.50	210	449.00
17	Carroll, Coon Rapids	156	13	------	----------	------	----------	50	348.00
18	Cass, Atlantic	481	266	97	419.20	181	1,000.20	897	1,371.00
19	Cedar, Tipton	520	71	63	617.00	78	616.00	206	441.00
20	Cerro Gordo, Mason City	657	187	43	322.00	300	2,649.00	960	1,279.00
21	Chickasaw, Nashua	181	76	76	396.50	138	955.00	236	489.00
22	Clay, Spencer	837	238	57	509.00	224	2,964.00	1,120	1,844.00
23	Clayton, Elkader	350	101	65	214.00	126	687.00	564	1,080.50
24	Clayton, National	205	60	43	201.00	125	835.00	189	368.00
25	Clayton, Strawberry Point	241	106	51	239.00	125	1,640.00	170	544.50
26	Clinton, De Witt	746	41	38	232.00	59	457.00	454	1,202.50
27	Crawford, Arion	305	70	25	121.00	100	660.00	514	1,214.00
28	Crawford, Schleswig	416	83	50	122.50	136	497.00	202	471.00
29	Dallas, Perry	484	126	75	320.00	96	634.00	397	1,674.00
30	Davis, Bloomfield	260	114	92	737.00	112	703.00	161	712.00
31	Decatur, Leon	272	111	67	800.50	51	508.50	305	677.00
32	Delaware, Manchester	605	115	61	285.00	426	1,882.00	968	1,533.00
33	Des Moines, Burlington	521	148	70	500.00	174	1,512.00	289	1,129.00
34	Dubuque, Dyersville	464	78	------	----------	104	883.50	177	1,349.00
35	Fayette, West Union	498	282	112	328.50	310	1,174.50	505	1,164.00
36	Fremont, Hamburg	316	69	85	612.50	98	900.50	234	731.00
37	Greene, Jefferson	354	44	24	115.00	54	554.00	457	1,145.00
38	Grundy, Grundy Center	361	86	45	352.00	133	1,008.00	628	987.00
39	Guthrie, Guthrie Center	168	64	67	263.25	24	180.95	199	625.00
40	Hamilton, Webster City	365	80	50	192.50	110	654.50	500	1,375.00
41	Hancock, Britt	221	92	32	255.00	98	587.00	294	928.00
42	Hardin, Ackley	225	65	------	----------	14	32.00	51	37.50
43	Hardin, Eldora	493	98	106	298.00	186	994.00	600	838.00
44	Harrison, Missouri Valley	307	73	22	310.00	128	880.00	440	912.00
45	Henry, Mt. Pleasant	505	190	208	896.00	240	1,313.00	451	860.00
46	Henry, Winfield	116	77	55	344.00	62	443.00	123	617.00
47	Humboldt, Humboldt	147	50	70	500.00	40	292.00	200	286.45
48	Ida, Ida Grove	285	105	25	156.50	85	253.00	365	474.00
49	Jackson, Maquoketa	260	75	66	217.00	96	724.00	254	242.40
50	Jasper, Newton	220	112	20	135.00	48	336.00	660	682.00
51	Jefferson, Fairfield	478	246	70	298.00	178	1,189.00	298	780.00
52	Jones, Anamosa	277	75	48	325.00	87	705.00	216	829.00
53	Jones, Monticello	191	50	------	----------	202	1,482.63	191	398.00
54	Keokuk, What Cheer	165	86	64	341.50	117	897.50	201	561.00
55	Kossuth, Algona	986	121	80	413.00	94	586.00	159	307.00
56	Lee, Donnellson	257	64	62	446.00	70	457.00	102	179.00
57	Lee, West Point	85	41	33	288.00	74	919.50	86	695.00
58	Linn, Central City	368	143	69	425.00	206	2,393.00	214	700.00
59	Linn, Marion	449	115	64	201.50	164	1,291.00	273	531.00
60	Louisa, Columbus Junction	236	106	37	272.00	120	1,440.00	307	1,072.00
61	Lucas, Derby	289	84	86	299.50	69	274.50	190	292.00
62	Lyon, Rock Rapids	320	112	70	463.25	181	1,256.00	277	808.50
63	Mahaska, Oskaloosa	862	130	90	1,073.00	150	1,824.00	602	1,929.00

IN LIVE STOCK DEPARTMENT, NUMBER OF HORSES, CATTLE, SWINE, AMOUNT OF PREMIUMS PAID IN EACH DIVISION.

Sheep		Poultry and Pet Stock		Premiums Paid						
Number exhibited	Premiums paid	Number exhibited	Premiums paid	Agricultural products	Fruits, plants and flowers	Culinary products	Textile and art department	School exhibit, boys and girls' department	All other departments	Number
46	$ 77.00	539	$ 192.75	$ 70.35	$ 40.65	$ 103.80	$ 123.50	$ 207.00	$ 432.00	1
45	172.00	791	557.50	169.00	41.50	72.75	76.50	160.00	192.00	2
43	243.00	260	272.00	74.50	74.50	137.00	133.75	125.25	66.50	3
--------	----------	174	42.60	242.30	62.60	89.50	86.10	45.00	------------	4
35	71.00	220	54.75	183.25	32.00	50.75	38.75	352.25	------------	5
--------	----------	1,178	300.00	53.25	----------	----------	----------	684.23	975.68	6
14	38.00	15	11.00	9.25	9.25	67.10	137.70	44.15	------------	7
60	268.00	447	146.05	137.10	111.80	153.05	263.75	85.90	110.00	8
40	53.00	799	385.50	138.25	118.25	31.50	87.75	127.45	13.00	9
39	99.00	941	350.00	60.00	14.20	94.55	126.05	112.75	------------	10
48	39.00	399	174.50	182.00	24.00	173.00	71.75	41.00	------------	11
--------	----------	251	128.50	67.75	37.25	67.50	115.25	585.75	------------	12
6	----------	733	311.75	144.35	46.40	115.25	111.00	270.50	------------	13
--------	----------	463	117.70	127.75	47.40	186.30	202.50	180.75	63.85	14
32	118.00	255	105.25	156.75	71.75	118.75	306.50	98.21	------------	15
--------	----------	348	164.00	12.25	27.75	29.95	119.95	372.50	------------	16
23	91.00	312	139.45	76.00	----------	32.40	43.50	----------	------------	17
68	141.90	1,007	190.50	296.50	76.25	114.75	238.40	104.75	------------	18
44	194.00	280	133.75	74.00	80.90	127.75	159.35	40.50	303.50	19
137	468.00	175	100.25	295.90	129.05	317.05	378.00	1,306.50	177.35	20
28	32.50	385	93.55	61.50	78.00	78.75	165.25	177.55	------------	21
16	69.00	420	217.75	254.25	16.75	150.95	205.75	483.50	------------	22
40	----------	90	47.75	35.70	72.95	120.50	161.10	498.25	------------	23
18	84.00	45	40.25	75.00	97.75	111.10	250.25	288.50	244.00	24
30	135.50	400	150.00	71.00	48.00	93.25	133.50	35.00	20.50	25
36	42.00	147	94.00	96.00	229.00	253.00	429.00	337.15	15.00	26
45	131.00	1,100	38.10	121.15	44.85	68.50	122.45	616.00	269.00	27
8	8.00	165	67.50	114.00	27.00	12.50	19.00	29.50	------------	28
71	266.00	321	60.40	97.25	86.00	155.25	298.00	49.25	9.50	29
80	247.50	302	186.25	60.50	60.25	34.75	134.50	168.45	56.10	30
4	10.00	467	121.00	79.25	109.78	80.27	90.45	53.00	------------	31
56	104.50	604	176.20	79.50	----------	----------	232.75	240.35	------------	32
233	503.00	737	394.77	1,103.75	----------	394.47	271.41	1,049.60	------------	33
--------	----------	263	150.50	238.50	----------	124.75	----------	165.30	25.00	34
88	234.00	587	197.50	99.50	74.75	71.95	258.25	30.50	12.00	35
23	58.50	770	481.00	98.50	50.25	98.25	331.50	55.05	------------	36
141	370.00	402	74.75	228.00	----------	178.25	202.00	----------	90.00	37
98	336.00	652	213.70	77.75	107.50	120.00	178.50	117.60	------------	38
24	49.40	172	46.25	231.49	30.11	106.62	89.95	12.26	1.72	39
30	160.00	474	273.00	180.50	163.25	144.90	123.85	259.00	71.02	40
18	77.00	178	62.50	150.25	74.25	160.25	133.00	30.50	60.00	41
--------	----------	300	44.80	253.00	----------	132.70	----------	----------	------------	42
34	120.00	500	173.75	141.50	101.25	91.45	273.00	873.50	------------	43
17	62.00	287	73.00	121.25	90.25	91.75	91.75	263.60	11.25	44
202	334.00	582	295.25	161.25	132.50	153.30	422.55	204.75	304.00	45
132	293.50	248	146.00	46.25	53.75	88.25	156.50	18.75	------------	46
10	35.00	256	45.75	175.00	50.00	197.00	149.50	114.50	187.00	47
--------	----------	150	50.00	101.00	11.50	87.50	32.75	205.75	------------	48
36	78.00	124	38.00	73.13	37.73	186.89	236.72	30.53	------------	49
26	53.25	590	228.00	215.90	46.50	146.00	365.75	670.65	119.00	50
68	173.00	446	2[illegible]0.00	129.80	50.00	45.20	117.00	----------	------------	51
26	82.50	360	116.75	58.50	63.00	97.75	55.25	191.50	------------	52
--------	----------	103	79.00	117.50	14.50	92.75	73.00	147.75	------------	53
21	68.00	274	154.00	37.75	70.50	107.75	61.25	----------	------------	54
82	224.00	448	161.50	206.50	143.50	253.00	396.50	401.60	133.25	55
17	46.00	132	59.50	40.50	56.50	156.75	142.00	140.75	------------	56
52	489.00	33	31.00	1.75	8.75	57.00	322.25	8.00	------------	57
22	60.00	412	211.00	85.00	53.50	63.70	111.15	----------	------------	58
4	126.50	406	100.50	21.00	20.75	104.00	132.00	224.25	------------	59
3	106.00	660	417.50	50.80	101.00	162.75	276.05	7.00	2.00	60
8	357.00	248	137.50	140.00	80.85	209.70	93.40	350.30	8.00	61
2	64.00	287	94.00	213.00	50.25	132.00	79.25	108.50	15.25	62
6	147.00	1,000	239.15	864.75	136.75	209.75	530.25	525.35	------------	63

TABLE NO.

Number	County, City or Town	Number of exhibitors	Number of exhibitors in live stock departments	Horses		Cattle		Swine	
				Number exhibited	Premiums paid	Number exhibited	Premiums paid	Number exhibited	Premiums paid
64	Marion, Knoxville	335	68	30	159.00	145	1,077.00	318	1,293.00
65	Marshall, Marshalltown (Fair)	1,950	154	83	374.00	203	1,261.00	835	1,205.00
66	Marshall, Marshalltown (Cong.)	213	37	------	----------	------	----------	255	1,342.00
67	Mills, Malvern	168	45	60	492.00	68	563.00	225	428.00
68	Mitchell, Osage	156	77	17	94.00	142	963.00	191	388.00
69	Monona, Onawa	119	54	17	72.00	9	133.00	138	634.00
70	Monroe, Albia	502	396	99	505.00	132	622.00	121	408.00
71	Muscatine, West Liberty	342	127	62	542.00	183	1,958.00	597	1,943.00
72	O'Brien, Sheldon	219	55	71	397.00	130	1,170.00	263	787.00
73	Page, Clarinda	263	67	75	683.00	115	862.00	210	1,062.00
74	Page, Shenandoah	284	134	88	1,024.00	121	1,446.10	367	1,652.10
75	Plymouth, Le Mars	320	43	41	213.00	70	369.00	286	392.00
76	Pocahontas, Fonda	327	45	42	97.00	145	1,256.00	279	1,007.50
77	Pottawattamie, Avoca	311	95	25	132.00	110	821.00	486	1,174.00
78	Poweshiek, Brooklyn	300	123	80	241.00	50	197.50	300	286.50
79	Poweshiek, Malcom	259	28	22	122.00	52	294.00	56	163.00
80	Sac, Sac City	429	74	25	210.00	173	1,158.00	459	591.00
81	Scott, Davenport	801	202	162	2,067.00	447	3,885.00	1,438	3,507.00
82	Shelby, Harlan	380	280	50	365.25	100	645.00	600	1,281.00
83	Sioux, Orange City	203	45	78	300.00	96	180.50	365	589.50
84	Story, Ames	278	162	93	638.00	60	353.00	277	549.00
85	Tama, Toledo	334	91	19	127.50	183	1,291.75	410	451.75
86	Taylor, Bedford	92	47	18	111.00	55	322.50	110	489.00
87	Van Buren, Keosauqua	255	61	48	235.50	28	140.00	100	165.00
88	Wapello, Eldon	197	51	85	446.00	88	393.00	236	429.00
89	Warren, Indianola	268	55	76	380.50	73	344.00	390	783.00
90	Wayne, Corydon	263	76	55	278.00	90	691.00	397	914.00
91	Webster, Fort Dodge	380	104	82	641.00	240	2,398.00	620	1,174.00
92	Winnebago, Forest City	149	65	53	289.00	105	308.00	372	668.50
93	Winneshiek, Decorah	686	53	25	201.00	162	1,386.00	293	772.00
94	Woodbury, Sioux City	479	191	71	987.00	567	5,336.00	1,378	3,391.00
95	Worth, Northwood	300	86	5	22.75	50	241.00	225	306.50
	Totals 1922 (95 Fairs)	35.351	9,716	5,526	$37,470.80	12,898	$ 100,124.20	34,905	$79,842.45
	Totals 1921 (92 Fairs)	31,444	9,022	5,281	$37,956.20	11,110	$ 90,532.93	32,593	$75,957.91
	Totals 1920 (95 Fairs)	26.232	7,553	5,000	$33,492.39	9,822	$ 73,522.20	31,565	$58,216.24
	Totals 1919 (93 Fairs)	23,751	5,881	4,342	$30,412.15	7,049	$ 49,285.67	19,815	$34,687.20
	Totals 1918 (89 Fairs)	21,108	4,863	3,911	$24,230.74	5,579	$ 31,889.76	12,111	$20,580.31
	Totals 1917 (93 Fairs)	24,218	4,459	5,552	$28,948.43	5,689	$ 33,992.13	10,695	$17,213.64
	Totals 1916 (99 Fairs)	23.955	4,454	6,836	$32,877.66	7,080	$ 37,440.65	11,151	$17,435.45
	Totals 1915 (93 Fairs)	20,687	4,144	6,036	$26,913.53	5,270	$ 27,628.92	9,377	$14,034.45

3—Continued.

Sheep		Poultry and Pet Stock		Premiums Paid						
Number exhibited	Premiums paid	Number exhibited	Premiums paid	Agricultural products	Fruits, plants and flowers	Culinary products	Textile and art department	School exhibit, boys and girls' department	All other departments	Number
140	333.00	576	211.80	142.50	108.75	117.00	446.75	300.00	12.00	64
123	275.00	1,150	365.00	275.00	228.00	289.00	377.00	678.05	25.00	65
--------	----------	--------	----------	668.00	----------	126.00	----------	60.00	----------	66
30	167.00	646	275.50	58.00	20.25	163.75	170.90	233.10	----------	67
16	47.00	415	142.25	68.00	29.75	41.55	106.80	42.00	65.00	68
9	35.00	135	76.00	109.75	21.75	154.00	238.25	92.00	2.00	69
44	254.75	52	52.00	51.50	43.25	62.75	76.25	687.00	1.75	70
130	260.00	385	169.00	191.00	100.25	154.75	288.25	813.00	----------	71
14	27.00	331	120.75	304.50	94.75	31.00	54.50	----------	----------	72
83	352.00	344	155.00	101.10	72.75	101.00	191.10	90.50	15.00	73
44	100.50	302	76.25	102.00	70.75	78.50	369.00	77.90	8.00	74
9	16.00	201	51.50	26.75	51.00	6.25	56.25	70.00	24.00	75
--------	----------	271	59.25	80.00	42.15	86.50	93.75	30.50	----------	76
24	72.00	250	199.00	286.00	101.25	145.50	150.15	74.95	6.00	77
46	96.75	525	127.75	72.75	107.50	140.25	----------	----------	----------	78
24	70.00	150	28.75	67.00	51.25	42.75	64.00	10.10	182.25	79
16	41.00	389	143.00	62.35	28.65	189.65	291.90	508.50	----------	80
265	957.80	345	146.50	670.00	528.50	86.50	250.00	642.00	182.50	81
50	83.00	210	77.00	29.75	54.45	40.00	120.20	49.00	127.75	82
8	17.00	295	41.25	49.50	6.50	21.50	103.65	197.00	4.25	83
216	444.00	318	100.00	139.20	----------	97.50	74.00	472.10	----------	84
93	277.00	210	202.25	153.65	62.30	197.15	333.60	77.55	----------	85
32	113.00	200	547.50	29.75	37.00	77.80	88.50	114.75	----------	86
36	80.00	344	101.50	90.75	41.00	35.15	62.25	372.25	30.00	87
29	91.00	228	103.00	59.00	104.00	113.00	211.50	18.50	----------	88
65	177.00	410	247.50	341.75	41.75	116.50	262.25	235.00	----------	89
98	406.00	548	151.50	289.70	140.50	255.25	214.50	441.00	9.50	90
35	317.00	275	127.25	91.75	80.50	92.00	163.00	447.00	40.00	91
17	43.00	279	137.50	109.50	38.25	102.15	99.25	391.30	380.00	92
38	172.00	316	125.25	77.75	91.75	109.00	110.25	162.00	----------	93
100	829.00	420	317.00	715.25	143.50	----------	319.85	1,317.25	----------	94
50	84.50	284	117.00	101.50	62.50	76.40	97.50	223.25	----------	95
4,637	$14,147.85	36,918	$14,975.27	$14,993.97	$ 6,393.82	$10,858.00	$16,253.53	$23,055.33	$ 5,102.47	
4,282	$13,308.65	29,703	$12,488.59	$14,983.36	$ 4,811.88	$ 8,888.95	$16,650.11	$18,691.44	$ 4,679.30	
3,681	$11,516.00	19,739	$ 8,435.50	$13,879.52	$ 5,043.20	$ 8,125.92	$12,994.07	$14,171.76	$ 4,389.79	
3,217	$ 8,535.70	17,351	$ 7,143.30	$ 9,958.92	$ 4,213.64	$ 6,168.88	$12,295.95	$ 9,462.68	$ 2,536.27	
2,895	$ 7,059.30	15,767	$ 6,566.67	$12,088.55	----------	$ 6,680.73	$ 8,639.97	----------	$ 11,570.72	
3,007	$ 7,120.03	16,184	$ 6,822.27	$11,685.07	----------	$ 6,927.21	$11,251.14	----------	$ 13,266.56	
2,897	$ 7,291.30	15,762	$ 6,678.76	$11,993.45	----------	$ 6,611.62	$11,176.08	----------	$ 12,122.53	
2,783	$ 6,140.77	14,317	$ 5,397.08	$ 9,934.51	----------	$ 6,307.62	$ 8,710.29	----------	$ 12,711.43	

TABLE NO. 4—TOTAL PAID ADMISSIONS AND ADMISSION FEES CHARGED AT COUNTY AND DISTRICT FAIRS IN IOWA FOR 1922.

Number	County, City or Town	Total attendance	Total paid admissions	Outside Gate Admissions			Grandstand					
				Adult	Vehicle	Children	Admission Fee				Total day admissions	Total night admissions
1	Adair, Greenfield	8,836	8,236	$.50	$.25	$.25	$.25	----	----	----	2,439	218
2	Adams, Corning	10,000	8,700	.35	.25	.20	.25	----	----	----	2,120	34
3	Allamakee, Waukon	9,800	9,250	.50	.25	.25	.25	$.10	----	----	1,916	598
4	Audubon, Audubon	13,795	10,283	.50	.50	.15	.15	.25	$.30	$.15	2,898	461
5	Benton, Vinton	16,916	16,632	.50	.25	.25	.25	----	----	----	2,104	1,995
6	Black Hawk, Waterloo	89,420	71,646	.50	.50	.25	.35	----	----	----	32,561	----
7	Boone, Ogden	5,437	5,087	.50	.50	.25	.25	----	----	----	1,475	----
8	Bremer, Waverly	23,000	21,401	.50	----	.25	.25	----	----	----	5,061	1,911
9	Buchanan, Aurora	5,000	4,317	.35	.25	.20	----	----	----	----	----	----
10	Buchanan, Independence	12,000	10,175	.50	.50	----	.25	----	----	----	1,941	894
11	Buchanan, Jesup	5,112	3,834	.50	.25	.25	----	----	----	----	----	----
12	Buena Vista, Alta	19,647	16,047	.50	.25	.25	.25	----	----	----	4,248	----
13	Butler, Allison	9,550	9,247	.50	.25	.25	.25	----	----	----	1,710	915
14	Calhoun, Manson	8,018	7,957	.50	.25	.25	.25	----	----	----	3,615	----
15	Calhoun, Rockwell City	8,500	7,711	.50	.25	----	.25	----	----	----	1,200	1,012
16	Carroll, Carroll	13,000	8,600	.50	.25	.25	.15	.25	----	----	3,424	1,319
17	Carroll, Coon Rapids	----	----	----	----	----	----	----	----	----	----	----
18	Cass, Atlantic	29,268	18,176	.50	.25	.25	.35	----	----	----	5,272	3,562
19	Cedar, Tipton	17,250	13,320	.50	.50	.25	.25	----	----	----	4,314	2,150
20	Cerro Gordo, Mason City	42,000	29,516	.50	.25	----	.50	----	----	----	10,524	11,733
21	Chickasaw, Nashua	14,000	10,570	.50	----	.25	.15	.35	----	----	2,550	2,820
22	Clay, Spencer	56,000	44,978	.50	.25	.25	.25	.35	1.00	----	9,400	5,700
23	Clayton, Elkader	10,653	7,830	.50	.50	.25	.25	----	----	----	2,288	1,341
24	Clayton, National	6,755	5,690	.50	.50	.25	.25	----	----	----	1,250	----
25	Clayton, Straweberry Point	10,650	10,124	.50	.50	.25	.15	.25	----	----	2,138	1,417
26	Clinton, De Witt	15,000	13,500	.50	.50	.25	.25	.50	----	----	5,315	----
27	Crawford, Arion	12,000	9,022	.50	.50	.25	.25	----	----	----	3,133	----
28	Crawford, Schleswig	23,000	----	----	----	----	----	----	----	----	----	----
29	Dallas, Perry	9,009	8,559	.50	.25	.25	.15	.25	----	----	2,234	636
30	Davis, Bloomfield	45,000	28,000	.50	.25	----	.25	.35	.50	----	10,520	6,650
31	Decatur, Leon	14,748	14,166	.50	.25	.25	.25	.50	----	----	6,206	1,619
32	Delaware, Manchester	22,000	15,312	.50	.25	.25	.25	----	----	----	4,232	2,987
33	Des Moines, Burlington	33,753	30,681	.50	.25	.25	.25	.50	----	----	7,831	6,750
34	Dubuque, Dyersville	7,884	7,884	.50	.25	----	----	----	----	----	----	----
35	Fayette, West Union	36,500	35,000	.35	.50	----	.25	----	----	----	4,120	2,930
36	Fremont, Hamburg	6,100	5,642	.50	.25	.25	.25	----	----	----	1,594	218
37	Greene, Jefferson	10,543	10,513	.50	.25	.25	.25	----	----	----	3,383	3,278
38	Grundy, Grundy Center	6,256	5,850	.50	.37	.25	.20	.25	.35	----	970	1,083
39	Guthrie, Guthrie Center	10,000	9,803	.50	.50	.25	----	----	----	----	----	----
40	Hamilton, Webster City	10,000	9,000	.50	.25	.25	----	----	----	----	----	----
41	Hancock, Britt	10,000	9,800	.50	.25	.25	.15	.25	.35	----	1,785	635
42	Hardin, Ackley	3,500	964	----	.50	----	----	----	----	----	----	----
43	Hardin, Eldora	10,000	9,296	.50	.50	.25	.25	----	----	----	1,959	2,443
44	Harrison, Missouri Valley	7,301	6,976	.50	.50	----	.10	.25	----	----	3,589	----
45	Henry, Mt. Pleasant	31,000	15,866	.50	.25	----	.25	.50	----	----	8,331	4,728
46	Henry, Winfield	10,084	8,973	.50	.25	.25	.25	----	----	----	3,601	2,599
47	Humboldt, Humboldt	13,643	10,643	.50	----	.25	.25	.35	----	----	5,292	2,398
48	Ida, Ida Grove	4,500	4,200	.50	----	.25	----	----	----	----	----	----
49	Jackson, Maquoketa	9,000	7,304	.50	.50	.25	.25	----	----	----	3,268	----
50	Jasper, Newton	18,000	15,000	.50	.25	.25	.25	----	----	----	4,766	2,487
51	Jefferson, Fairfield	20,000	16,000	.50	.50	.25	.35	.50	----	----	6,200	4,800
52	Jones, Anamosa	12,289	10,523	.50	.50	.25	.25	----	----	----	5,286	----
53	Jones, Monticello	18,000	11,200	.50	.50	.25	.25	----	----	----	3,332	2,350
54	Keokuk, What Cheer	6,000	4,591	.50	.25	.25	.35	.60	----	----	1,971	----
55	Kossuth, Algona	25,642	20,874	.50	.25	.25	.25	----	----	----	3,422	3,122
56	Lee, Donnellson	9,865	5,786	.50	.25	----	----	----	----	----	----	----
57	Lee, West Point	6,600	3,030	.50	.25	.10	.25	----	----	----	801	908
58	Linn, Central City	6,000	5,780	.50	.50	.25	.25	.50	----	----	2,315	1,900
59	Linn, Marion	10,376	9,876	.50	.25	.25	.25	----	----	----	4,358	1,725
60	Louisa, Columbus Junction	8,431	8,031	.50	.25	.25	.25	.35	.50	----	3,985	2,781
61	Lucas, Derby	4,465	3,840	.50	.25	.25	----	----	----	----	----	----
62	Lyon, Rock Rapids	16,000	15,355	.50	.25	.25	.25	----	----	----	9,501	----
63	Mahaska, Oskaloosa	40,000	34,700	.50	.25	.25	.50	----	----	----	12,000	8,200

TABLE NO. 4—Continued.

Number	County, City or Town	Total attendance	Total paid admissions	Outside Gate Admissions			Grandstand					
				Adult	Vehicle	Children	Admission Fee				Total day admissions	Total night admissions
64	Marion, Knoxville	25,000	21,100	.50	.25	.25	.25	.35	.50	----	3,850	3,770
65	Marshall, Marshallt'n (Fair)	46,921	38,500	.50	.25	.25	.25	----	----	----	7,845	6,479
66	Marshall, Marshallt'n (Con.)	6,000	----	----	----	----	----	----	----	----	----	----
67	Mills, Malvern	18,000	15,000	.50	.25	.25	.25	----	----	----	6,036	----
68	Mitchell, Osage	12,266	9,614	.50	----	.10	.25	----	----	----	2,026	634
69	Monona, Onawa	3,533	3,533	.50	----	.25	.25	----	----	----	1,915	----
70	Monroe, Albia	13,452	13,209	.50	.25	.15	.25	----	----	----	3,376	1,874
71	Muscatine, West Liberty	23,817	21,492	.50	.50	.25	.25	.50	----	----	3,705	2,434
72	O'Brien, Sheldon	17,254	15,868	.50	.25	.25	.25	.50	----	----	2,135	842
73	Page, Clarinda	13,500	10,021	.50	.25	.25	.25	.50	----	----	5,147	3,801
74	Page, Shenandoah	11,350	10,385	.50	.25	.25	.25	----	----	----	5,210	----
75	Plymouth, Le Mars	6,287	6,287	.35	----	.25	----	----	----	----	----	----
76	Pocahontas, Fonda	7,387	6,205	.50	.25	.25	----	----	----	----	----	----
77	Pottawattamie, Avoca	10,000	6,451	.50	.25	.25	.25	----	----	----	3,253	----
78	Poweshiek, Brooklyn	7,000	----	----	----	----	----	----	----	----	----	----
79	Poweshiek, Malcom	1,615	1,109	.25	.25	----	.25	----	----	----	41	----
80	Sac, Sac City	20,352	16,968	.50	.25	.25	.25	----	----	----	4,291	3,329
81	Scott, Davenport	80,899	73,437	.50	.30	.30	.50	.75	----	----	22,916	20,901
82	Shelby, Harlan	20,000	13,471	.50	.35	.25	.25	----	----	----	6,070	----
83	Sioux, Orange City	9,443	8,843	.50	.50	.35	.15	.25	----	----	1,235	535
84	Story, Ames	6,000	3,776	.50	.25	.25	.15	----	----	----	356	----
85	Tama, Toledo	8,002	8,002	.50	.25	.25	.25	----	----	----	3,319	----
86	Taylor, Bedford	13,000	9,683	.50	.25	.25	.15	.25	----	----	5,342	1,496
87	Van Buren, Keosauqua	6,500	3,880	.25	.25	----	----	----	----	----	----	----
88	Wapello, Eldon	9,479	9,421	.50	.25	.25	.25	----	----	----	2,413	186
89	Warren, Indianola	14,000	11,000	.35	.25	.25	.15	.25	.35	.50	1,900	6,000
90	Wayne, Corydon	16,491	12,991	.50	.25	.25	.25	----	----	----	7,606	3,933
91	Webster, Fort Dodge	38,757	30,691	.50	----	.25	.25	.50	.75	1.00	11,189	13,072
92	Winnebago, Forest City	10,000	9,002	.50	.50	.25	.25	----	----	----	2,638	2,764
93	Winneshiek, Decorah	20,859	16,884	.50	----	.25	.25	----	----	----	2,245	1,165
94	Woodbury, Sioux City	61,186	61,186	.50	----	.25	.50	----	----	----	17,646	12,520
95	Worth, Northwood	6,500	4,500	.50	.25	----	.25	----	----	----	600	----
	Totals 1922 (95 Fairs)	1,571.940	1,273,406	----	----	----	----	----	----	----	374,055	191,042
	Totals 1921 (92 Fairs)	1,476,042	1,209,283	----	----	----	----	----	----	----	331,200	156,067
	Totals 1920 (95 Fairs)	1,806,033	1,456,755	----	----	----	----	----	----	----	443,147	209,745
	Totals 1919 (93 Fairs)	1,580,643	1,506,079	----	----	----	----	----	----	----	362,587	160,135
	Totals 1918 (89 Fairs)	1,150,461	910,349	----	----	----	----	----	----	----	266,661	75,795
	Totals 1917 (93 Fairs)	1,345,259	1,094,968	----	----	----	----	----	----	----	270,991	91,766
	Totals 1916 (99 Fairs)	1,272,479	991,057	----	----	----	----	----	----	----	279,714	66,600
	Totals 1915 (93 Fairs)	1,115,605	838,047	----	----	----	----	----	----	----	----	----

Admission Fees Paid	$1.00	75 cents	60 cents	50 cents	37 cents	35 cents	30 cents	25 cents	20 cents	15 cents	10 cents
General Admissions, outside gates:											
Adults	----	----	----	83	----	5	----	2	----	----	----
Vehicles	----	----	----	23	1	1	1	55	----	----	----
Children	----	----	----	----	----	1	1	70	2	2	2
Grandstand Admissions	2	2	1	18	----	13	1	68	1	11	2
Quarterstretch Admissions:											
Persons	----	----	----	2	----	2	----	29	----	3	----
Vehicles	1	----	----	----	----	----	----	8	----	----	----

LIST OF FAIRS RECEIVING COUNTY AID, SHOWING AMOUNT AND PURPOSE FOR WHICH IT WAS APPROPRIATED.

Name of Fair	Location	Amount	Appropriated for
Benton County Fair	Vinton	$ 1,000.00	Permanent Improvements
Buena Vista County Fair	Alta	150.00	Premiums, School Work
Carroll County Fair	Carroll	1,000.00	Improvements and Maintenance
Cedar County Fair	Tipton	700.00	General Improvements
North Iowa Fair	Mason City	6,000.00	Buildings
Clay County Fair	Spencer	4,200.00	Maintenance, Buildings, etc.
Crawford County Fair	Arion	500.00	Buildings
Tri-County Fair	Perry	1,000.00	Expense and Premiums
Decatur County Fair	Leon	1,000.00	Up-keep, Grounds and Bldgs.
Delaware County Fair	Manchester	1,000.00	New Swine Barn
Hardin County Fair	Eldora	1,000.00	General Expense
Humboldt County Fair	Humboldt	672.00	Painting Buildings
Jackson County Fair	Maquoketa	1,000.00	Permanent Improvements
Jasper County Fair	Newton	1,000.00	Permanent Improvements
Anamosa District Fair	Anamosa	500.00	New Buildings
Jones County Fair	Monticello	500.00	Permanent Improvements
Lee County Fair	Donnellson	300.00	Buildings and Gen. Expense
West Point District Fair	West Point	300.00	Permanent Improvements
Marion Interstate Fair	Marion	500.00	Permanent Improvements
Derby District Fair	Derby	38.25	Premiums, Boys & Girls Dept.
Marion County Fair	Knoxville	1,000.00	Buildings
Mills County Fair	Malvern	500.00	Interest on Loan
Monroe County Fair	Albia	400.00	Taxes
Clarinda Fair	Clarinda	500.00	New Swine Barn
Shenandoah Fair	Shenandoah	500.00	Buildings
Mississippi Valley Fair and Exposition	Davenport	1,000.00	Permanent Improvements
Central Iowa Fair	Ames	500.00	Permanent Improvements
Tama County Fair	Toledo	1,000.00	New Swine Barn
Warren County Fair	Indianola	1,000.00	Permanent Improvements
Hawkeye Fair and Exposition	Fort Dodge	1,000.00	Permanent Improvements
Boone County Fair	Ogden	1,000.00	Permanent Improvements
Total County Aid		$30,760.25	

Statement showing total receipts from ticket sales, cost of advertising and per cent of ticket sales spent for advertising by County and District Fairs in 1922.

County	Name of Fair	Total Ticket Sales	Cost of Advertising	Per Cent of Ticket Sales
Adair	Adair County Fair	$ 5,534.60	$ 114.05	2.06
Adams	Adams County Fair	2,940.80	166.30	5.65
Allamakee	Allamakee County Fair	4,896.00	163.66	3.34
Audubon	Audubon County Fair	7,215.70	335.07	4.64
Benton	Benton County Fair	8,137.45	346.70	4.26
Black Hawk	Dairy Cattle Congress	38,719.75	3,334.74	8.61
Boone	Boone County Fair	3,110.05	152.88	4.91
Bremer	Bremer County Fair	10,110.94	645.79	6.38
Buchanan	Aurora Agricultural Fair	1,416.05	----------	----------
Buchanan	Buchanan County Fair	6,092.00	927.01	15.21
Buchanan	Jesup Fair & Stock Show	1,704.75	211.90	12.43
Buena Vista	Buena Vista County Fair	7,976.11	1,014.68	12.72
Butler	Butler County Fair	4,920.25	81.80	1.66
Calhoun	Calhoun County Fair	5,160.30	23.05	.44
Calhoun	Rockwell City Fair	4,749.75	697.00	7.96
Carroll	Carroll County Fair	5,575.35	504.60	9.06
Carroll	Four Counties Dist. Agr'l. Fair			
Cass	Cass County Fair	10,471.45	697.05	6.65
Cedar	Cedar County Fair	7,596.55	269.87	3.55
Cerro Gordo	North Iowa Fair	21,362.50	914.78	4.28
Chickasaw	Big Four Fair	5,964.54	281.29	4.71
Clay	Clay County Fair	23,755.09	960.16	4.04
Clayton	Elkader Fair	5,360.55	419.15	7.82
Clayton	Clayton County Fair	3,451.80	188.41	5.45
Clayton	Strawberry Point District Fair	2,750.15	‡531.53	1.93
Clinton	De Witt Fair	7,686.22	433.86	5.64
Crawford	Crawford County Fair	5,198.27	155.00	2.98
Crawford	Community Fair & Live Stock Exposition	----------	160.10	----------
Dallas	Tri-County Fair	3,450.30	306.10	8.84
Davis	Davis County Fair	13,666.95	449.30	3.28
Decatur	Decatur County Fair	9,913.75	412.98	4.16
Delaware	Delaware County Fair	10,011.25	395.45	3.94
Des Moines	Burlington Tri-State Fair	19,370.22	1,487.20	7.57
Dubuque	Dubuque County Fair	3,689.25	200.20	5.43
Fayette	Fayette County Fair	12,773.30	240.83	1.88
Fremont	Hamburg Fair	3,257.54	381.30	1.17
Greene	Greene County Fair	5,778.00	147.75	2.55
Grundy	Grundy County Fair	4,315.30	267.40	6.19
Guthrie	Guthrie County Fair	5,021.25	323.39	6.44
Hamilton	Hamilton County Exposition	4,113.25	224.08	5.44
Hancock	Hancock County Fair	5,452.18	240.98	4.41
Hardin	Four County Agricultural Fair	41.00	108.00	100.00
Hardin	Hardin County Fair	5,810.85	725.62	12.48
Harrison	Harrison County Fair	4,620.55	346.72	7.50
Henry	Henry County Fair	14,108.55	756.00	5.35
Henry	Winfield Fair	5,049.25	241.50	4.78
Humboldt	Humboldt County Fair	6,457.50	197.00	3.05
Ida	Ida County Fair	1,895.45	121.20	6.38
Jackson	Jackson County Fair	4,901.99	‡162.83	3.32
Jasper	Jasper County Fair	7,283.44	350.00	4.80
Jefferson	Jefferson County Fair	11,685.93	450.00	3.85
Jones	Anamosa District Fair	6,700.51	399.25	5.95
Jones	Jones County Fair	7,479.00	287.31	3.84
Keokuk	What Cheer Fair & Exposition	2,750.00	35.30	1.28
Kossuth	Kossuth County Fair	10,292.33	707.42	6.87
Lee	Lee County Fair	3,472.75	171.47	4.93
Lee	West Point District Fair	3,757.25	254.49	6.77

County	Name of Fair	Total Ticket Sales	Cost of Advertising	Per Cent of Ticket Sales
Linn	Wapsie Valley Fair	4,210.64	633.26	15.03
Linn	Marion Inter-State Fair	5,708.95	336.58	5.89
Louisa	Columbus Junction District Fair	6,645.10	195.75	2.94
Lucas	Derby District Fair	1,806.00	72.77	4.02
Lyon	Lyon County Fair	9,017.04	459.55	5.09
Mahaska	Southern Iowa Fair & Exposition	27,307.11	1,598.59	5.86
Marion	Marion County Fair	9,027.72	786.00	8.70
Marshall	Marshall County Fair	16,372.00	596.30	3.64
Marshall	Marshalltown Swine & Corn Congress	------------	25.00	------------
Mills	Mills County Fair	8,509.67	‡654.69	7.69
Mitchell	Mitchell County Fair	5,489.00	278.20	5.06
Monona	Monona County Fair	2,328.45	130.00	5.58
Monroe	Monroe County Fair	7,668.60	651.72	8.49
Muscatine	West Liberty Fair	10,780.50	492.93	4.57
O'Brien	Sheldon Fair	8,110.00	‡769.25	9.48
Page	Clarinda Fair	10,134.20	730.86	7.22
Page	Shenandoah Fair	7,254.55	444.47	7.12
Plymouth	Plymouth County Fair	2,141.45	429.95	2.0
Pocahontas	Big Four Fair	2,239.32	105.50	4.71
Pottawattamie	Pottawattamie County Fair	4,232.70	313.23	7.40
Poweshiek	Brooklyn Agricultural Fair	------------	11.50	------------
Poweshiek	Poweshiek County Central Agricultural Fair	386.50	63.65	1.64
Sac	Sac County Fair	7,195.00	360.64	5.01
Scott	Mississippi Valley Fair and Exposition	55,792.45	9,096.47	16.30
Shelby	Shelby County Fair	7,411.05	371.88	5.01
Sioux	Sioux County Fair	4,152.44	346.70	8.34
Story	Central Iowa Fair	2,091.70	210.44	1.0
Tama	Tama County Fair	4,998.80	252.40	5.04
Taylor	Taylor County Fair	9,517.64	525.60	5.52
Van Buren	Van Buren County Fair	1,215.75	58.60	4.82
Wapello	Wapello County Fair	5,698.30	308.31	5.41
Warren	Warren County Fair	6,540.21	193.95	2.96
Wayne	Wayne County Fair	10,854.04	377.87	3.48
Webster	Hawkeye Fair and Exposition	19,966.75	1,589.94	7.96
Winnebago	Winnebago County Fair	5,223.45	459.00	8.78
Winneshiek	Winneshiek County Fair	8,716.62	881.55	10.10
Woodbury	Inter-State Fair	44,395.00	4,850.69	10.92
Worth	Worth County Fair	2,250.55	207.90	9.29

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‡ Advertising and printing combined.

IOWA STATE FAIR

There is no reason why the richest agricultural state in the Union should not have the greatest live stock and agricultural fair in the Union.

And that was exactly what Iowa had in 1922.

Agricultural writers from the far corners of the United States who came to view this sixty-eighth annual exposition of Iowa's unbounded wealth, found themselves gasping for words with which to surpass the pictures which they had drawn of it in their writings of previous years. It was so gigantic in its proportions, so intensive in the thoroughness with which it covered every field of the state's diversified agricultural interests, so interesting even for the mere amusement-seeker that comparative phrases were hard to find.

It was a triumphant state fair.

Live stock, farm produce, machinery, automotive equipment, boys and girls' club work, women's activities, state institutions, fish and game—these are a few of the outstanding feaures which were arrayed against a minor background of everything that Iowa raises, makes and uses.

But better than any of these features were Iowa's own people. There were 361,261 of them who passed through the state fair gates this year. One editor's comment declared that the people themselves were the most interesting and inspiring part of the entire exposition. They were happy, prosperous, contented people. They gave one the feeling of stability, honesty, intelligent progress. They left no doubt in one's mind as to the reason for Iowa's unquestioned supremacy in agriculture.

The dominant success of the fair is reflected in the fact that the attendance of 1922 showed an increase of more than 23 per cent above that of the previous year. And, had it not been for rainy weather on several days, it is believed that the total number of fair visitors might have been even 50,000 or 60,000 higher. This would have set a new mark for Iowa State Fair crowds.

Weather bureau statistics show that 2.60 inches of rain fell on Tuesday, the day before the opening of the fair. This put the roads in bad condition for automobile travel. Automobiles are becoming more and more one of the most important means of travel for state fair visitors. On Saturday night .64 inches of rain fell and on Monday night .13 inches.

While this slightly retarded the fair-going public during the opening days, a heavy downpour over southern and western Iowa on Tuesday night and Wednesday forenoon brought the greatest damage to the attendance record. Six inches of rain fell at Atlantic and over five inches at Creston, with a precipitation of .79 inches in the Des Moines vicinity. This made many roads impassable. From reports received from western and southern Iowa, the Tuesday-Wednesday rain cut attendance for Wednesday-Thursday at least 40,000 or 50,000.

Amusement features of the fair, as usual, drew large crowds. The grand stand performances headlining the entertainment program for both afternoon and evening played to large audiences throughout the period of the exposition. In the afternoon grand stand attendance there was an increase of 25 per cent over the previous year, registering a total of 82,132 admissions for the seven afternoons. An increase was also made in the evening grand stand attendance. In 1921 it was 55,525 for seven nights, while in 1922 it reached 56,969 for six night shows.

Society horse shows have been growing in popularity from year to year. The 1921 fair scheduled five nights of these events. The 1922 fair condensed them to four nights and packed the live stock pavilion with spectators every evening. The total attendance (8,819) for four nights in 1922 was approximately the same as for five nights in 1921.

The society horse shows, however, were only part of an array of pure bred animals which crowded the State Fair exhibit barns until temporary shelters had to be provided in some classes to make room for all of them. The live stock show was heralded by judges and farming authorities as the supreme feature of the great exposition. No fair in America had ever witnessed anything like it and many made the forecast that it would be some time before another such show could be assembled anywhere, either in quality or numbers.

By actual count there were 588 head of horses, ponies and mules on exhibition, 1,536 head of cattle, 3,137 head of swine and 835 head of sheep. All of these surpassed the highest expectations of fair officials. The poultry department scored the greatest triumph in point of increased entries. While entries in 1921 were approximately 2,000, there were 2,826 birds shown in 1922.

The Iowa breeder held the center of the stage in practically all classes of live stock shows. Iowans won a majority of the ribbons. Not content with honors in their own territory, many of these same breeders shipped their prize Iowa herds to neighboring state fairs and won high honors in competition with premier breeders from all parts of the country.

Many of the minor breeds which, heretofore, have been represented only in a very small way at state fairs in the past, were present in strong numbers in 1922.

As in the 1920 and 1921 Iowa State Fairs, the Pure Bred Sire and Cow Test Association exhibits in the cattle barn attracted wide attention among visitors. These exhibits are among the most constructive features of the exposition. They point out to the breeder the greater production which he may have by using pure bred sires in building up his herds and the economies to be achieved by regularly testing his milk cows and weeding out the non-producers.

Iowa boys and girls, both in live stock and in other classifications, staged the greatest show of its kind held in the United States at the 1922 fair. In the junior exposition there were 351 head of baby beeves shown, 23 pure bred heifers, 487 pigs, 43 lambs and 564 birds in the poultry department. In mere numbers these marked new records and were a source of amazement to thousands who had not been familiar with the growing activities of boys' and girls' farm clubs in Iowa. The quality of the animals shown was declared by judges to be superior to anything they had ever observed in a club show.

Live stock was only one of the fields in which the junior farmers and farm girls of the state presented unusual displays. All activities of the boy and girl club work were represented at the exposition. One hundred and twenty-two demonstrations were presented in the boys' and girls' club building and in the sale ring of the cattle barn. Garment making, meal preparation, canning, home furnishing, live stock judging, apple spraying, poultry culling, corn judging and like activities were embraced in these highly interesting demonstrations. The crowning feature of the junior fair was a mammoth boys' and girls' club parade on Wednesday afternoon, presenting in floats and exhibits all lines of club work carried on in Iowa at the present time.

On account of the large number of entries in the open cattle and swine departments, it was necessary to provide temporary stalls and pens in tents and the old cattle sheds for the boys and girls calf and pig club exhibit. The temporary quarters were very unsatisfactory to the boys and girls exhibiting their stock and to the public who wished to view these exhibits.

The boys and girls interested in this line of work will, in a few years, be the leading farmers of the state and should at this time be given all the encouragement possible in their chosen line of endeavor. The state should, before another state fair, provide suitable quarters for both pig and calf club exhibits.

Next to live stock, the agricultural and farm produce sections of the fair probably attracted most attention from those who came to learn and profit by the great exposition. There were 16 county produce and grain exhibits in the Agricultural building and 14 individual farm exhibits. These showed graphically nearly every variety of products raised on Iowa's farms at the present time.

Immediately adjoining these were hundreds of exhibits of fruits and flowers—the largest horticultural display ever assembled at an Iowa State Fair. A new decorative scheme added much to the beauty of the Agricultural building. It consisted of white trellis running over all the pillars inside the building and draped with southern smilax.

For the practical farmer who came to the fair to learn and study, Iowa State College had a most interesting exhibit under the grand stand. This embraced five divisions of the college: Agriculture, Engineering, Industrial Science, Home Economics and Veterinary Medicine. Not only the educational work of the college was illustrated, but also some of the more recent results of the Experiment Station research. A competitive radio exhibit for amateurs of the state was conducted by radio experts of the college. Immediately adjoining the main State College exhibit, the public speaking department of the school presented several short plays each day for the benefit of rural communities interested in taking up the question of community dramatic work. The plays attracted a large attendance each day.

For the first time in the history of the fair, all of the smaller colleges of the state joined together in 1922 and arranged a joint display for the benefit of young men and women interested in enrolling for higher education. The plan contemplates making this a permanent feature of the fair.

Another feature of wide interest to Iowans was the exhibit arranged by the board of control of State Institutions. This exhibit, housed under the grand stand, showed examples of the work done by the 16 state institutions—fancy work, wood carving, painting, carpentry, and like activities. The products of the farms and gardens at these institutions were displayed in connection with other showing.

The growing place which women's activities are having in the life and progress of the state as a whole was amply demonstrated by the all-embracing women's department of the 1922 Iowa State Fair. The programs were so widely varied and so thoroughly developed that it would have required the entire period of the fair for any one person to have witnessed and participated in all of the events scheduled. Style shows, baby health contest, home economics lectures and demonstrations, little theater plays, pageants, dressmaking exhibits, cooking demonstrations, citizenship talks—these and dozens of like numbers vied with each other for the attention of the thousands of women who came to the fair.

In the baby health department there were more than 550 entries. Judging of babies had to be started a day earlier than usual in order to complete it on scheduled time.

One of the most widely interesting features of the fair was a contest to select the most beautiful girl in Iowa—to be crowned Queen of the State Fair. Miss Bonnie Murray of Sioux City was chosen queen from among more than 6,200 girls from every county in the state entered in the contest. The coronation ceremony took place before a packed grand stand on Thursday afternoon. Miss Murray was presented with a check for $1,000 by the Des Moines Register, which co-operated with the State Fair management in conducting the contest.

Another new attraction at the fair and one of the most popular was a series of grand opera presentations in front of the grand stand in connection with the evening performances. Nine eastern opera singers, a ballet and a chorus of 50 Iowa voices enacted the first scene of the second act from "Aida." The feature was pronounced one of the finest on the entire amusement program of the fair. It bears promise of being taken up by many of the other larger fairs in response to a popular demand.

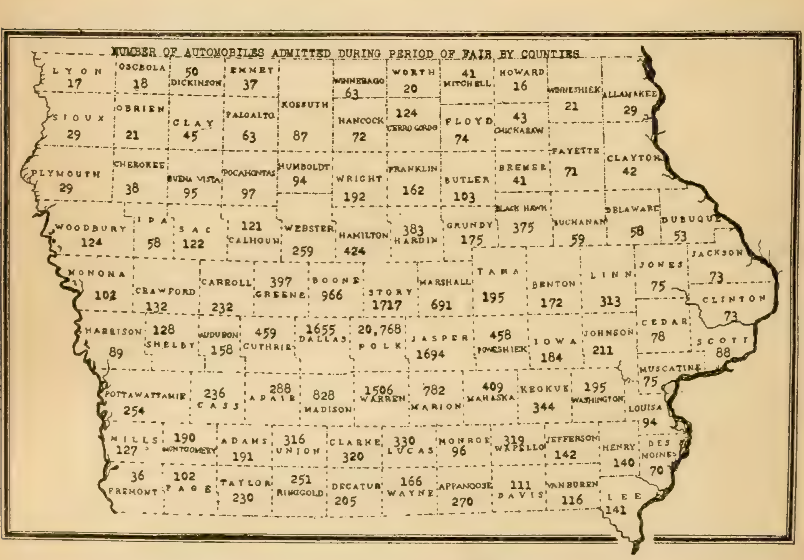
Horseshoe pitching as a form of sport and of popular amusement reached its climax at the Iowa State Fair in a National Horseshoe Pitching Tournament, open to the champions of every state in the Union. There were 85 entries from 12 states in the men's national tournament. Every available inch of standing room and seating accommodations was taken throughout the period of the tournament. The national title, after several days of hard-fought pitching, was finally won by Frank Lundin of New London, Iowa. A state horseshoe tournament, with 85 entries from all parts of Iowa, also attracted wide attention and was also won by Frank Lundin. The

Women's National Tournament, with nine contestants, all from outside of the state of Iowa, was won by Mrs. C. A. Lanham, of Bloomington, Illinois. Horseshoe pitching tournaments promise to become regular features of fairs in the future.

There was a marked increase in the number of World War Veterans and Old Soldiers who availed themselves of the free admission privilege during the 1922 Iowa State Fair. On Saturday, World War Veterans' day, 3,752 veterans were admitted free, as compared with 2,540 in 1921. During the period of the fair 2,187 Old Soldiers, their wives and widows, claimed free admission as against 1,692 in 1921.

An interesting indication of the extent to which automobiles are playing a part in the lives of Iowa farmers is given in the 1922 count of automobiles passing through the gates of the fair. A total of 53,487 cars were admitted to the fair grounds during the ten days. Every county in the state was represented in the automobile attendance figures. There were also 31 other states of the Union represented by 1,254 cars. One came from Canada. Monday, August 28, was the largest automobile attendance, registering 7,359 machines.

The following illustration shows the number of automobiles passing through the outside gates during the ten days of the fair. In addition to the cars actually counted at the gates an estimate was made each day of the cars remaining in the camp grounds. The


NUMBER OF AUTOMOBILES ADMITTED DURING PERIOD OF FAIR BY COUNTIES
LYON 17
OSCEOLA 18
DICKINSON 50
EMMET 37
WINNEBAGO 63
WORTH 20
MITCHELL 41
HOWARD 16
WINNESHIEK 21
ALLAMAKEE 29
SIOUX 29
OBRIEN 21
CLAY 45
PALOALTO 63
KOSSUTH 87
HANCOCK 72
CERRO GORDO 124
FLOYD 74
CHICKASAW 43
FAYETTE 71
CLAYTON 42
PLYMOUTH 29
CHEROKEE 38
BUENA VISTA 95
POCAHONTAS 97
HUMBOLDT 94
WRIGHT 192
FRANKLIN 162
BUTLER 103
BREMER 41
BLACK HAWK 375
BUCHANAN 59
DELAWARE 58
DUBUQUE 53
WOODBURY 124
IDA 58
SAC 122
CALHOUN 121
WEBSTER 259
HAMILTON 424
HARDIN 383
GRUNDY 175
JACKSON 73
MONONA 102
CRAWFORD 132
CARROLL 232
GREENE 397
BOONE 966
STORY 1717
MARSHALL 691
TAMA 195
BENTON 172
LINN 313
JONES 75
CLINTON 73
HARRISON 89
SHELBY 128
AUDUBON 158
GUTHRIE 459
DALLAS 1655
POLK 20,768
JASPER 1694
POWESHIEK 458
IOWA 184
JOHNSON 211
CEDAR 78
SCOTT 88
MUSCATINE 75
POTTAWATTAMIE 254
CASS 236
ADAIR 288
MADISON 828
WARREN 1506
MARION 782
MAHASKA 409
KEOKUK 344
WASHINGTON 195
LOUISA 94
MILLS 127
MONTGOMERY 190
ADAMS 191
UNION 316
CLARKE 320
LUCAS 330
MONROE 96
WAPELLO 319
JEFFERSON 142
HENRY 140
DES MOINES 70
FREMONT 36
PAGE 102
TAYLOR 230
RINGGOLD 251
DECATUR 205
WAYNE 166
APPANOOSE 270
DAVIS 111
VAN BUREN 116
LEE 141

total estimate for cars in the camp grounds for the period of the fair was 8,200, practically all of which came from outside of Polk County:

It would be possible to devote an indefinite number of pages to describing the thousands of features of the 1922 Iowa State Fair. No further description, however, could be as eloquent as the statements of leading agricultural papers in their own official reports of the triumph of this greatest of all expositions. There follow a few of the comments of some of these papers, presented in the words of their expert writers who spent from four to seven days studying in the various departments of the fair.

IOWA'S BEST FAIR AND EXPOSITION

(From the Iowa Homestead, Des Moines, Iowa)

Almost every year the Iowa State Fair and Exposition is described as the best ever. Were this not a trite expression it might well be repeated this year and be spelled with capital letters, for all things considered it was truly the greatest and best fair and exposition ever held in Des Moines. The fair closed its gates on Friday evening last week with the turnstiles recording an attendance of 359,745 as compared with 294,002 last year, an increase of 65,745. Every day, except Wednesday of the second week, when rain interfered, showed a larger attendance than the corresponding day a year ago.

The fair management smiled every day of the classic and justly so, for the big machine had been so well oiled and put in such excellent repair that it worked smoothly from day to day without accidents of any sort. Secretary A. R. Corey and President C. E. Cameron, as well as all others in authority, deserve the highest praise and the thanks of the public for their untiring efforts in making this big educational event a success. The performances before the grand stand were excellent and well attended as were also the night society horse shows, held in the live stock judging pavilion. These performances did their full share in augmenting receipts in the treasurer's office. Financial records are not yet complete, but it is rumored that total receipts were $12,000 larger than last year and that there will be a handsome surplus left for starting next year's exposition and making needed improvements.

The live stock show as a whole was not only very large, but the quality was excellent in nearly every department of the fair. There was also marked uniformity in the different breeds of live stock—more so, it seemed, than usual. Breeders generally were in good humor with the great majority feeling that the pure-bred live stock business has reached the turning point and that from now on prices will continue to improve gradually. Nobody is looking for a price boom, but steady improvement in demand is generally expected for some time to come.

From an educational point of view and from the standpoint of improved agriculture in the future, nothing on the grounds surpassed in importance and interest the live stock contests of Iowa's boys and girls—our future farmers. Mention of their exhibits and winnings was made in The Iowa Homestead last week, but we desire to reiterate that this feature of the fair is very much worth while and should be encouraged to the fullest extent possible. When the young people on the farm are given an opportunity to own some live stock and participate in showing their products at local fairs and at a great state fair, there will be little difficulty in keeping them on the farm. Friendly rivalry in fitting live stock and other products for local and state fairs and later exhibiting them in competition with others, is as helpful to the youngsters as it is to grown-ups.

Judging from the magnificent fruit show—5,000 plates in all—in the horticultural building, Iowa is rapidly becoming a more important fruit state. At any rate growers are paying much more attention to spraying and otherwise caring for their trees than they did a few years ago. Only one exhibitor showed unsprayed fruit and he, of course, won no prizes except in a few classes where he had no competition. The work of the state horticultural society, the extension service at Ames and the county agents combined has had a wonderful effect upon fruit growing in this state, yet it may be said that improvement in orchard management has just begun. It will not be long before the great majority of Iowa farm orchards will be well taken care of and high class fruit produced. When that step has been taken a good market for all surplus fruit will unquestionably be found and Iowa apples will not rot on the ground as so many have done this year.

The apple exhibit was displayed in much better shape than it ever has been. In former years the fruit was classified by exhibitors; this year it was placed according to the class to which it belonged, which made the display as a whole of much greater educational value to the public. Earl Ferris, Hampton, Ia., superintendent of fruits, and his able assistant, R. S. Herrick, secretary of the Iowa State Horticultural Society, are to be congratulated upon making this change in the fruit show.

Not only was the fruit better displayed than in former years, but the show was also much larger than ever and the quality better. This has been a good fruit year in Iowa and nature should be given her proper share of credit for the success of the show. The 10-plate exhibit of apples was a magnificent thing to look at. There were 35 entries, making a total of 350 plates of five apples each. These included Wealthy, Jonathan, Grimes Golden, Northwestern Greening, Golden Delicious, Chenango Strawberry, Maiden Blush and Ben Davis. A sweepstakes was awarded to each of these varieties and from those sweepstakes plates the grand sweepstakes plate was picked. This was won by E. O. Worth of Mondamin, Iowa, on a plate of Golden Delicious.

The farm orchard exhibit was also larger than usual. It, too, was arranged on a table by itself and proved to be very valuable from an educational point of view. Varieties for a farm orchard from Des Moines southward, considered as standard, are the following, given according to time of maturity of the fruit: Duchess, Whitney No. 20, Wealthy, Tolman Sweet, Grimes Golden, Golden Delicious, Jonathan and Mammoth Black Twig. The grape and other fruit exhibits were just as fine, relatively, as the apple show and were equally well displayed. In short, the whole fruit show was a great credit to the state.

The following members of the extension service of the Iowa State college judged the fruit show: H. E. Nichols, head judge; C. V. Holsinger judged plums, pears, peaches and grapes; W. J. Kocken, apples, and C. S. Holland, apples.

An exhibit showing in a general way what members of the various cow testing associations in Iowa are learning from weighing the milk of their cows and testing it for butter fat was brought out by the Iowa State College. It consisted of six cows, half of which were scrubs and half grade Holsteins. Production records showed that the three scrubs in 1921 yielded a gross profit, figuring the milk sold in the fluid state, varying from $21.62 to $29.40 per head. Had the butter fat been sold the profit would have varied from $11.51 to $21.12 per cow. By gross "profit" in these cases is meant the cash income from milk or butter fat, less cost of the feed consumed by the cows. In the case of the three grade Holsteins—much better producers—the gross profit, figuring the milk sold in the fluid state, ranged from $87.94 to $95.85 per head. On the basis of butter fat sales, the gross profit ranged from $72.29 to $78.30 per cow.

These records were all made in 1921 and showed very clearly the advantage of keeping good cows. In the case of the scrub cows the cost of milk production varied from $1.05 per 100 pounds to $1.37, while on the butter fat basis costs ranged from 14 to 21.1 cents per pound. On the other hand the grade Holsteins produced milk at costs ranging from 49 cents to 57 cents per 100 pounds while on the fat basis costs ranged from 14 cents to 16.5 cents a pound. On the other hand some records were displayed on a chart showing that a high grade herd of Jerseys, in the course of three years, produced profits per cow—difference between feed cost and price brought by products sold—ranging from $114.27 to $194.84. In a high grade Guernsey herd profits ranged from $67.68 to $153.35 per cow in a series of three years.

A chart was also shown on which the results obtained at the college in grading up by breeding common scrub cows to registered bulls of Jersey, Guernsey and Holstein breeding were recorded. Third generation heifers from these different lines of breeding are now on the college farm that show wonderful improvement over the original scrubs. So striking are these results that farmers who have learned of this work are beginning to realize the value of using pure-bred sires of the right type for grading up purposes. These exhibits proved very interesting to thousands of farmers, judging from the attention they bestowed upon them.

The wool exhibit made by the Iowa Fleece Wool Growers' Association this year in the horticultural building was unusually fine. No less than

190 fleeces were shown and wool experts declared that it was not only the very best exhibit ever seen at the Iowa State Fair but, barring the exhibit made at the Ohio State Fair, the very best show of its kind ever seen at any fair.

Fourteen wool growers and six boys' and girls' clubs put on the show, so competition for prizes in the several classes of wool shown was very strong. The membership of the Iowa Fleece Wool Growers' Association now totals around 12,000, which means that the association has done exceedingly well during the last year in making the organization stronger and securing better prices for the products sold.

Last year Iowa wool marketed through this association brought from 15 to 28 cents a pound, while this year's clip is now bringing from 38 to 50 cents a pound with a fair prospect of still better prices later in the season. Approximately one-half of the wool produced in Iowa is now marketed through the producers' association and the prospects are that a considerably larger percentage of the Iowa wool growers will join before another year has passed, because the organization is getting considerably higher prices for the wool of its members than is being received by non-members who sell their wool to local buyers. Sheepmen have done wonderfully well in the co-operative marketing of their wool and are making it worth while for their members to produce a higher grade of wool. Organization has made it possible for producers to get paid for their wool on a quality basis. This fact was emphasized by those in charge of the wool exhibit to every one who made inquiry at their booth.

One of the striking, and to many the most pleasing exhibit, in the horticultural building was a display of gladioli. The principal exhibitors of gladioli were G. D. Black of Albert Lea, Minn., and Beebe & Tucker of Mitchellville, Ia. Both these men are extensive growers of this flower, in fact Mr. Black grows 20 acres a year on his Minnesota farm for the wholesale trade and a smaller acreage in Iowa for retail purposes. The gladiolus display was so excellent that the judge, T. D. Smedley, Waterloo, declared it was good enough to win first place in any flower show in the United States. In fact the whole horticultural building was most artistically decorated with over a hundred palms, ferns and bay trees and lattice work for flowers. This added greatly to the beauty of the building and produced a wonderful setting for all the exhibits housed therein.

The county exhibits were fully up to the high standard set in former years. Each booth, to the casual observer, seemed to make as handsome a display as every other booth. It took keen discrimination to score each product minutely and later, after adding the scores of each product, to find the total for each exhibit to make out the final rating.

The 14 individual farm exhibits were also very artistically arranged and proved interesting alike to country and city people—all seemed to study them quite in detail. The placing for both county and individual farm exhibits follow:

County Exhibits

Northern Section—1, Osceola county, 838.1. North Central Section—1, Webster county, 844; 2, Hardin county, 771. South Central Section—1, Polk county, 932; 2, Guthrie county, 917.5; 3, Carroll county, 893; 4, Greene county, 871.2. Southern Section—1, West Pottawattamie, 907; 2, Clarke county, 871.5; 3, Cass county, 862.5; 4, Warren county, 859.6. Sweepstakes for the highest scoring exhibits—1, Polk county; 2, Guthrie county; 3, West Pottawattamie; 4, Carroll county; 5, Clarke county.

Individual Farm Exhibits

North Central Section—1, Mrs. E. J. Heise, Arlington, 874.5; 2, P. M. Peterson, Cherokee. South Central Section—1, E. M. Wilson, Panora, 943.5; 2, J. T. Wasson, Panora, 929.2; 3, Spring Valley Farm, Coon Rapids, 877.5; 4, Stumpy Hill Farm, Boone. Southern Section—1, J. A. Mason, Carlisle, 933.2; 2, Maple Side Farm, Swan, 912.2; 3, J. W. Freel & Son, Pleasantville, 911.5; 4, B. Freel & Son, Pleasantville, 694.2. Special Polk County—1, John Justice, Ankeny, 919.3. Sweepstakes for highest scoring exhibits—1, E. M. Wilson, Panora; 2, J. A. Mason, Carlisle; 3, J. T. Wasson, Panora; 4, John Justice, Ankeny.

Many persons were interested in the display made by the several state institutions under the management of the State Board of Control. The institution at Cherokee showed all sorts of hand work done by men and women inmates in the way of crocheting, tatting, rug making, basketry and wood work. Most visitors marveled at the excellent work put out by these institutions. At Fort Madison a chair factory is operated and the product turned out is of high quality. It sells on the market in competition with other products of similar character. Different things are manufactured at the different institutions, each specializing on some one product.

The Iowa State College exhibits, housed under the grand stand, were unquestionably better than any this institution has ever shown before. The agronomy department featured the several high yielding varieties of oats which it has developed in recent years. Iowa 103 oats, for example, averages 3.9 bushels more per acre than the common varieties it is displacing over the state; Iowa 105, 2.5 bushels more; Iowar, 6.1 bushels more; and Iogren, 7.6 bushels more than the common varieties. The latter variety is one of recent development and has not yet been tried by farmers on a large scale, but it is one of the most promising sorts the college has originated. We are growing annually five million acres of oats in Iowa. If none but the new varieties were grown, which average 4.34 bushels more per acre than the old varieties, Iowa would produce approximately 24 million bushels more per year than is now the case. This shows the importance of the work of oat improvement.

The soils department called attention to the results that have been obtained from liming the soil in various parts of the state. Statistics were presented, for example, from soils requiring two tons or less of ground limestone per acre, which showed that with manure average yields in four-year rotations were 1.6 tons clover, 57.5 bushels first-year corn, 51.6 bushels second-year corn and 48.3 bushels oats. In the same rotation of clover, corn, corn and oats, manure and lime increased the yield up to the following figures: Clover, 1.8 tons per acre; first-year corn, 62.1 bushels; second-year corn, 56.1 bushels; and oats, 56.3 bushels per acre. Similar results have been obtained on soils pronouncedly sour, such as require from two to three tons of limestone per acre. The lesson was that liming soils pays and approximately 75 per cent of Iowa soils are in need of lime. In this connection the soils department showed a new and very simple test for soil acidity that any farmer can readily make himself. The product used for making the test is called "Richorpoor." Any county agent can give information about where to buy "Richorpoor" and how to apply it in testing soils for acidity.

The department of botany displayed a number of the common plant diseases affecting farm crops. One of these diseases—corn ear rot—was featured. Last year Iowa corn suffered considerably from this disease, which is a mold. It is also referred to as dry rot of corn. It flourishes in years when much wet weather comes during the latter part of August and the first part of September and may do considerable damage in some sections of the state this year. The principal damage done by this disease, however, is in the spring at planting time in reducing the stand. Seed corn may be infected with dry rot and not be noticed on the ears unless a very close inspection is made. And even then it may not be detected. Fortunately it can easily be found if the seed is given a germination test. When the mold is present it begins to grow as soon as the corn sprouts and can be seen on the sprouts and their roots as a white filmy mold growing all over these parts. Corn infected with the dry rot fungus should not be planted, as it is sure to reduce the stand from 15 to 30 or more per cent, the exact amount depending upon the amount of the fungus present on the seed kernels. All kernels affected with this rot die before the sprouts come through the ground. Every farmer should learn to recognize this disease and guard against it.

The poultry department displayed some very interesting figures from a poultry feeding test that has been in progress for nine months on the college poultry farm. Results from five pens were shown. The birds in each pen have been fed the same scratch grain and rye mash of grain for nine months. In addition to these rations some pens were fed definite quantities of a high protein product as tankage, beef scrap, powdered buttermilk, etc. The scratch grain for all pens was composed of two parts by weight of shelled corn and one part of whole oats, while the dry mash was composed of one-third by weight of ground corn, ground oats and wheat middlings.

Pen 5 received nothing but these feeds and produced 36.2 eggs per hen in nine months. Pen 1 received 25 per cent of tankage mixed with the basal dry mash and produced 60.5 eggs per hen in the same time. Pen 2 received 25 per cent beef scrap mixed with the basal dry mash and produced 70 eggs per hen. Pen 3 received 25 per cent dried buttermilk with the basal dry mash and produced 97 eggs per hen. Pen 4 received about four times as many pounds of fresh buttermilk as the basal dry mash and produced 100.7 eggs per hen in the nine months. This test will be continued till a full year has been completed, but so far it has taught a most valuable lesson concerning the necessity of furnishing a certain amount of animal protein in the hen's ration if a high egg yield is desired.

The agricultural economics department presented some striking results taken from 26 Marshall county farms operated by their owners in the usual way. The figures showed that the cost of producing grain, beef and pork varies to an astonishing extent. These variations are due to soil conditions, varieties of grain grown, methods of feeding employed and general management particularly in the utilization of horse and man labor to best advantage.

Manufacturers and distributors of farm implements and machinery were out in full force this year and they seemed to be confident that the farmer's purchasing power will soon be a great deal larger than it has been during the last two years or so. In other words they view the future with confidence. This is good news for the farmers who still look with more or less suspicion upon prices of farm products during 1923. Live stock producers as a class, however, are just as hopeful about the future as are the farm machinery men. They are not worrying about prices half so much as about the present scarcity of money. Could they obtain the necessary financial support to buy cattle and hogs they could put their big supply of feed to excellent use and make good profits. The same is true of those who want to buy good breeding stock while price conditions are favorable.

It was a real pleasure to walk through the acres and acres of machinery exhibits and see some of the hundreds of improvements that have been made in recent years and to note the new things that are being put on the market. The standard makes of machinery were to be seen everywhere and each exhibitor, it seemed, had something new to which to call the attention of the public. Progress, wonderful progress was to be seen on every hand. The American farmer owes much of his efficiency and his ability in reducing production costs to the farm machinery manufacturer and the latter, in turn, owes just as much to the progressive attitude of the farmer to seize upon worth while improvements and make use of them.

It is impossible to discuss the immense exhibits in detail, but it may be said in passing that there were a lot of labor-saving conveniences in evidence in which farm women were intensely interested. Electric lighting outfits and accessories that can be used with them were seen on every hand. Milking machines also attracted a great deal of attention and manufacturers stated that the demand for them has grown considerably in the last thirteen months on account of so many farmers turning to the dairy cow to augment the daily income of each.

In the dairy line a two-gallon churn attracted a great deal of attention. This is turned by hand and churns butter in one minute; in fact butter was made with this little churn on the grounds in 30 to 55 seconds, and the surprising thing about it was that the butter made came in good granular form. The bowl is made of ordinary white porcelain enameled ware and when filled to its capacity for churning, one can make two pounds of butter to the churning. The advantage of such a churn for average farm conditions is evident. One need not hold the cream for long periods of time, but can churn every day if desired and never miss the time. The churn was invented in Australia and will soon be in the hands of retailers all over the middle west.

Ford and Fordson attachments are becoming so numerous that we would hesitate to guess at the number now on the market. One new and rather startling invention was exhibited as an attachment for a Fordson on the fair grounds that deserves mention. It is a contrivance with which gas is produced by the decomposition of water. Water is composed of two gases, hydrogen and oxygen. As the hydrogen is liberated it is used as fuel, supplying the motive power for the machine. Should this invention prove a success it will undoubtedly be attached to all kinds of tractors and trucks, for it is said to greatly reduce the fuel cost. It is already in use, experimentally, for heating apartment houses and it is said to reduce the cost of heating some 30 to 45 per cent.

Those who find difficulty in filling their silos on account of scarcity of labor took pleasure in investigating the Ronning silage cutter that was exhibited. This machine cuts the standing corn in the field into silage lengths and elevates the cut corn into a wagon box. It is then hauled to the silo and blown into it in the usual way. With this machine five men can fill a silo without lifting as much as a single cornstalk. A thousand of these machines are already in use in this country, half of them in Iowa. It is said to give excellent satisfaction and the manufacturers claim that as soon as the machine becomes generally known no silos will ever be left unfilled in the fall.

Another interesting thing among the machinery exhibits was a windmill with an attachment for making electricity. This attachment has been made for four years and is said to be very economical for furnishing electricity for lighting the farm home. When the windmill is not needed for pumping water it stores up electricity in a large storage battery and thus supplies both water and light without any fuel cost.

BEEF CATTLE

The Iowa State Fair has established a reputation throughout the entire country for putting on superior beef cattle shows. This year's show will only help to strengthen this reputation, for it was truly a wonderful exhibition of bovine excellence. More cattle were in the stalls and the quality showed an improvement over last year. The number of the different breeds shown were as follows: Shorthorns, 261; Polled Shorthorns, 60; Hereford, 242; Aberdeen Angus, 148; Red Polls, 82, and Galloways, 30. The show has grown to such proportions that it really is a problem to handle the judging with the present pavilion accommodations. Main interest centered about the judging of the Herefords, Shorthorns and Angus, but the other breeds also attracted a great deal of attention. With the pure-bred business fast establishing itself on a firm foundation and good prices for cattle prevailing on the open market the breeders were all in very good spirits.

DAIRY CATTLE

The dairy cattle show was by far the largest in several years. Not only was it the largest show in some time, but it was also a show of high quality and a show of highly valuable and productive dairy animals. The Holsteins led in number with 144 entries, Jerseys came second with 87, while Guernseys and Ayrshires followed with 49 and 33 head, respectively. Milking Shorthorns were represented by 27 entries. No Brown Swiss cattle were shown this year. The total number of dairy entries summed up to 513, a number considerably larger than has been shown at this fair in several years. In contrast to the comparatively light showing of Iowa dairy cattle last year, practically all of this year's herds were from Iowa. The only herd from out of the state among the Holsteins was from Union College, College View, Neb. A. D. Ralston of Macon, Mo., was the only outside showman of Jerseys, while the Guernseys were all from Iowa excepting the herd of E. S. Persons, Minot, N. D. The Ayrshires, however, comprised of three herds, two of which came from Wisconsin and the other from Iowa.

Earl Weaver, head of the dairy husbandry department, Iowa State College, and assistant superintendent of dairy cattle at the fair, stated that the Jerseys, Guernseys and Ayrshires had advanced considerably in number of entries and a little in quality over those shown last year. As to numbers, the Holstein show was about the same as last year, but better in quality.

DRAFT HORSES

There isn't a draft horse show at any of the state fairs that attracts as much attention as the one at the Iowa State Fair. Hundreds of persons watched the judging this year and the show was decidedly worth their while. Four breeds, Percherons, Belgians, Shires and Clydesdales, were exhibited. The Percheron show of more than 160 entries led the list, and it was the best show the breed has ever held at Des Moines. Belgians stood next in numbers with about 115 head. Shire entries totaled approximately 80 and of Clydesdales there were about 40 head.

Judges found plenty of competition in the three first breeds. Especially were the younger classes strong, which indicates horse breeders are preparing to supply breeding stock for the demand that is certain to come. Horsemen from all over the country attended the ringside. They came to see what Iowa breeders are doing, whether they too have sensed the upward trend of the horse business. Practically every exhibitor, they found, is increasing his holdings preparing young stuff to meet the demand. Men acquainted with the horse situation have contended for the last several years that there would be a near horse famine in this country when present stocks come to be replaced. It took breeders a good while to see this future condition in the face of a slow market two or three years ago, and it is doubtful if they started restocking soon enough.

The state fair draft show is a pretty good indicator of horse breeders' activities. The better show this year, especially the increased entries and larger number of exhibitors, evidently means that breeders have felt the stimulus of an awakening demand. Of course there are a number of established breeders who show as a matter of policy every year and since Iowa is a great draft horse state there is always a good show, but this year there were many young breeders and new exhibitors, which is a favorable indication.

Iowa furnished most of the entries. In one or two of the breeds only a few head from outside the state were shown.

SWINE

The hog show at the Iowa State Fair was nearly as large in numbers but surpassed in uniformity and quality any previous swine exhibitions at Des Moines. It was composed of 625 Hampshires, 510 Duroc Jerseys, 454 Poland Chinas, 317 Spotted Poland Chinas, 292 Hampshires and 13 Berkshires. In the boys' pig club classes there were 117 Poland Chinas, 81 Duroc Jerseys, 81 Hampshires, 54 Spotted Poland Chinas, 26 Tamworths, 25 Chester Whites, 20 Yorkshires and four Berkshires. There were 2,550 shown by breeders and 408 by pig club boys or a grand total of 2,958 head on exhibition. The capacity of the swine division is a few over 3,000. The pig clubs won a new national record. Last year they exhibited 300 head. Previous to that the record for numbers was held in Atlanta, Georgia, where 245 head were exhibited in 1919.

Three breed associations established new national records for numbers exhibited at state fairs—Tamworths, Hampshires and Spotted Poland Chinas. The Tamworths exhibited 65 head last year at Iowa State Fair and 255 head at the National Swine Show in Peoria, Ill. Their exhibit this year was larger than the Chester Whites, which for many years held third place at the Iowa State Fair.

The swine show this year might well be called a quality exhibition throughout. All of the breeds displayed improved quality and a uniformity that made every ring a contest. There was missing the outstanding individuals of former shows. The grand champions of the breeds were all good specimens in type and quality. Probably the most outstanding feature of the show was the exhibit of Tamworths. The aged herd of sows and the aged herd owned by exhibitor were outstanding exhibits and probably the best ever shown of that breed.

The only fly in the ointment was the disallowing of the prize moneys won by a well-known Poland China firm from Missouri, that exhibited under false pretenses. With this exception, the swine show at Iowa State Fair was probably the best in its history and sets a new record for the future that will be difficult to excel.

SHEEP

With pure-bred sheep from 30 Iowa breeders, two from Missouri and one each from Nebraska and Illinois, the sheep exhibition at the Iowa State Fair decidedly eclipsed that of last year in numbers, if not in quality. There were about 700 sheep shown. The Shropshires led in numbers with Oxford Downs, Southdowns and Cotswolds following in the order named. An unusually fine increase was shown in the number of entries in all the fine wool breeds, the Rambouillets and Delaines especially. There were about 160 Delaines shown, three times as many as last year. All in all, a better quality of fine wool sheep was shown, indicating that the growing of sheep for wool is gaining in popularity. The total entries for this year's sheep exhibition exceeded that of last year by at least one-third and the entries were fairly well divided among the various breeds and classes. All pens were crowded to make room for the extra number of entries.

Some of the good sheep to be shown here, and really fitted for the purpose, suffered from the two weeks' hot weather preceding the fair. Consequently, it was necessary for several breeders to substitute poorer qualitied sheep.

An exhibition of milk goats in one corner of the mammoth sheep barn afforded considerable comment and several sales of milk goats were reported. The goats are quite in demand, as their milk is of high quality and rich in butter fat. They appeal especially to persons in towns and suburban residents.

STATE FAIR POULTRY SHOW

(From Iowa Homestead)

The poultry show staged at Iowa State Fair this year excelled any previous show of its kind both in number of birds shown and in the quality displayed throughout. Entries in this year's poultry show exceeded last year's exhibit by at least 25 per cent, there being 2,300 birds shown in the open classes and about 600 in the boys' and girls' classes. The show was not monopolized by the breeders of carload lots. In contrast, it was a show put up by specialty breeders who exhibited fowls of a high degree of quality. All breeds were well represented, the only two standard breeds not present were the Sicilian Buttercups and the White Faced Black Spanish. The Rhode Islands, Barred Rocks and White Wyandottes had by far the largest classes, the Barred Rocks having 16 separate entries, which was considerably more than for previous years.

V. G. Warner, superintendent of poultry, said: "The prize winners could be taken out of any of the classes exhibited here and the remaining birds would be as good in quality as are seen at the average show at this time of the year. This statement points to the fact that this year's poultry show was far above the average in quality. A fortunate circumstance for Iowa in connection with this quality show was the fact that all the poultry exhibitors were Iowans.

A feature of unusual interest to the fowl followers at the fair was the wonderful showing made of pigeons. Previous to this year, pigeon entries had always been rather weak. This year, partly due to a national meeting of Swiss Mondaine pigeon breeders held here, pigeon breeders from all parts of the United States were present with their breeds. There were pigeon exhibitors at the fair from as far east as New York and as far south as South Carolina and as far west as California. Breeds for squab breeding were more in prominence, yet there was a good showing of pigeons in the Carrier, Homer, Fantail and Carneaux classes.

In the duck and geese classes, entries also exceeded those of last year, the rise being about 20 per cent above the year previous. This was the first time the waterfowl were shown under the National Waterfowl Breeders' Association. Gerald R. Duncan, state vice-president of the association, was in charge, while Oscar Grow, state secretary, was the judge. The quality of the entries was fair with some outstanding individuals in both the duck and geese classes.

Entries in the Bantam classes also increased in this year's show. There were nearly twice as many bantams this year, their number being 112. Several exceptional high quality and pretty banties were on exhibition.

The poultry building on the hill was crowded from morning till night with enthusiastic chicken fanciers who wished to see what the other fellow had succeeded in raising and to compare the fruits of his or her efforts with the results of his own. Representatives of many commercial chick feeds, feed mixtures, egg producing mixtures and the like were present and no doubt convinced many people as to the better ways of handling chickens for profit. More interest was shown in the judge's results than has been manifested heretofore, which indicates that more people are becoming acquainted with the value of good poultry and waterfowl.

FARM BUREAU DAY AT THE FAIR

(From Iowa Homestead)

After conceding Iowa the honor of standing second to his own state in agriculture, and practically everything else worth while in the world, Governor Preus, of Minnesota, counseled the farmers of the Hawkeye state to follow in the footsteps of those of his own state and find a solution of many of their problems by widening their field of co-operative effort.

The governor is thoroughly sold on co-operative effort for farmers. He made it very plain that he favored that plan of action in preference to state ownership of industries, as preached in North Dakota. The latter, he was sure, would prove impractical, chiefly because it would be immediately embroiled in politics.

He reviewed the birth and progress of co-operative effort in Minnesota, from the days of five cent butter to the present, when Minnesota creamery butter takes first rank in the world of business and sells for attractive prices accordingly.

Citing the advantages of co-operative marketing in the live stock field he declared that no less than 65 per cent of all the live stock marketed in Minnesota this year will reach the ultimate consumer through means of the co-operative live stock commission companies recently established in that state.

After making the flat statement that "government operation is not as efficient as private enterprise," the governor touched upon some of the more pressing problems of the hour, strikes, transportation, etc. Because they are so far away from the producing coal fields he declared that the late coal strike had done more than any other single influence this year to tie up industry in Minnesota and the states farther west, with the situation still further aggravated by the railroad strike coming on the heels of it. He insisted that the Interstate Commerce Commission has the power to take over the rolling stock of the railroads, and that if it would do that and turn its immediate attention to the problem of coal distribution it could confer an immeasurable blessing upon the American people and their various lines of business.

He closed with an earnest tribute to "the best of all governments upon earth," and declared that the "United States has given more happiness to more people than all the other governments in existence."

The morning session opened with a half-hour concert by the Page County Farmers' Band, an aggregation of capable young farmer-musicians under the leadership of the veteran bandmaster, Major Landers.

President C. W. Hunt, of the Iowa Farm Bureau Federation, spoke briefly, and in an optimistic strain. He declared that the handwriting on the wall indicates a very general improvement, if not a complete solution, of some of the questions that have been vexing the agricultural world for so many years, questions of marketing, finance and legislation. And he reminded his audience of the measures introduced and passed in congress and many of the state legislatures, all designed for and leading to an early improvement of conditions surrounding the business of tilling the soil.

At the request of President Hunt, E. H. Cunningham, secretary of the Iowa Farm Bureau Federation, took the platform and talked a few minutes. His remarks had to do chiefly with his recently accepted work in reorganizing the U. S. Grain Growers, Inc. He expressed himself as hopeful of ultimate success, at the same time warning his hearers against being over-optimistic as to immediate results.

The five live stock commission companies established at various terminal points by the National Live Stock Producers' Association are all "functioning 100 per cent efficient," said Mr. Cunningham, and it is hoped that similar agencies can be put into operation at other points in the near future.

J. W. Coverdale, secretary of the American Farm Bureau Federation, talked a few minutes, telling of the work of the national organization, and what it hoped to be able to do in the future.

Solution of the membership problem of Iowa Farm Bureau Federation may come through the wives of members. That women are vitally interested in the organization was evident during the forepart of the afternoon session of Farm Bureau Day. They had been granted or had appropriated, perhaps, as future developments may show, that portion of the day. Mrs. W. A. Tanner, Palo, Ia., chairman of the women's congressional district committee of the state federation, probably revealed the secret in stating that when a man gets in a tight place he hunts for a woman to get him out. Maybe Secretary Cunningham did not realize it at the time, but he probably furnished the entering wedge for a solution of the membership problem when he asked women representatives of the congressional districts to meet with him in Des Moines last April. And now the other half of the farm bureau in Iowa declare that they are going to see it through.

Mrs. Ellsworth Richardson, Pella, Ia., presided in the afternoon. Different members of the women's committee were asked to report on methods they were using to strengthen the bureau in their districts. These committee women are seeking support of farmers through their wives and children and are managing the farms while their husbands are away on bureau business.

Mrs. C. C. Schuttler, Farmington, Mo, chairman of the American Farm Bureau Federation committee of five women on rural home problems, addressed the meeting on the woman's part in farm bureau work and her opportunities for community service. The organization made a mistake in not calling upon the women sooner. They now have a vote and wield a bit of influence, she pointed out, so that winning their support is quite is important as converting the heads of families. In the wives of members, the bureau has an untapped reservoir of power and resourcefulness which she would have turned to account.

Farm women fail in their calling, she declared, if they do not use at least a part of the pleasure gained through labor saving devices in making the community the kind of place in which they want their children to live. It is not enough that they train their children properly, but they must throw neighbors in the way of proper upbringing their children so that the entire community may be made better. She urged the wives of Iowa farm bureau members to interest their neighbors in the organization. But organization alone will not solve all ills. Members must make use of the bureau, else it will not function. Not only must the farmer be convinced that he should join, but he must learn that the bureau is worthless unless he uses it. No one else can use it for him.

The annual farm bureau day closed with conferences of congressional district executive committeemen. A state-wide membership drive is planned for October 12th. Plans were discussed for collecting delinquent dues and of convincing bankers that they should honor membership checks presented to them for collection.

In the membership drive the state federation will supply executive committeemen with plans, directions, form letters, contract blanks, and notify all local county and township officers of the county meetings. The executive committeemen will arrange for county meetings during September, notify all officers and directors, supply those in attendance with plans for directing township meetings, and confer with local representatives on their special membership problems.

The county bureau will be responsible for local meetings and assure the presence of all officers and township directors and their wives. An effort will be made to get at least one township director or officer and his wife and as many more as possible to attend the county-wide meeting. Township directors will arrange the meeting in their communities and insure the attendance of as many local officers, co-operators and members as possible. They will apportion the territory of each district to at least three active members and supply each membership committee with a list of paid and delinquent members in that district. Soliciting committees will report to the directors who will in turn report to the county bureau.

STATE AND NATIONAL HORSESHOE TOURNAMENT

(From Iowa Homestead)

A remarkable feature of growing interest is the rejuvenated interest displayed in the old-fashioned game of horseshoes. A national tournament for both men and women with entries from 13 states, ranging from New York to California and from Minnesota to Oklahoma, provided thrills a-plenty for affectionate followers and ringside spectators of the coming game, "barnyard golf." A state tournament was also held to decide this year's state champion. In this there were 89 entries, mostly champions of their counties or districts. The national tournament had 86 entries who could be pitchers without reputations, but most of these contestants were either state or city champions. The interest shown in the tournaments served in no small way to detract people from the main attractions in front of the amphitheater. A throng of people filled the bleachers surrounding the courts from morning until night, astonished at the ease with which the contestants threw ringers and doubles time after time.

Horseshoe bids fair to become a popular universal sport, especially since so many fairs and clubs have initiated tournaments with valuable prizes for the winners. Small clubs similar to golf clubs are being organized throughout the United States. "Barnyard golf" is a game purely of science and skill, a game of clean outdoor competition and a game which requires wonderful nerve and muscle control. Although the original game of horseshoes was confined quite largely to the farmers, the new game seems to be followed extensively by their city cousins. But the fact still remains that our rural horseshoe pitchers tend to make the better contestors as is evidenced in the final standing of the national tournament to decide the world's championship. Out of 16 players allowed to compete in the finals, nine were Iowans First, second and third places were held by Iowans, the first being Frank Lundin, a lad of 22, from New London, Iowa. The new world's champion came to the tournament unheralded and unsung as a horshoe pitcher, but before he had played long in the preliminaries of the state tournament it was conceived that he was an exceptional pitcher.

Lundin defeated all his opponents and won the state title by defeating Frank Jackson, the 1921 national and state champion, of Kellerton, Iowa, the first two games out of three by the score of 50-10 and 50-17. In the national tournament, Lundin maintained a fast pace of about two ringers out of every three shoes pitched. In winning both state and national honors, Lundin carried off a sum of $575 in prizes and cash. The former world's champion, Frank Jackson, pitched very consistently and proved himself to be second to none except the youthful marvel. Lyle Brown, a 16-year-old Des Moines lad, placed third.

The official game of horseshoe, or "barnyard golf," as it is affectionately called by real lovers of the game, require that the pegs be eight inches above the ground and surrounded by potter's clay which must be moist and worked to a putty-like consistency. The pitching distance is 40 feet from stake to stake for the men and 30 for the women. The stakes must slant one inch in the direction of the coming throw. The official horseshoe must weigh two pounds eight ounces and cannot be wider than three and one-half inches between the calks. A certain number of revolutions is given to the shoe when it leaves the pitcher's hand so that the shoe will be open when it lights at the peg. This is the hardest thing to learn in horseshoes, so expert pitchers say.

JOSHAWAY SEES THE STATE FAIR

What He Saw, What He Liked, and Why He's Coming Again

(From Wallaces' Farmer, Des Moines, Iowa)

That noted contributing editor of Wallaces' Farmer, Joshua Crabapple, turned his talents to a new field of effort last week. He took in the Iowa State Fair and this is what he has to tell Cousin Bill about it.

Dear Bill: My legs ache a little still, two of the kids have colds, and the wife says she wouldn't go through it again if somebody was to pay her for it, which there ain't much danger of. But just the same I claim it was a good fair and I'm glad I went. I got in early to see the big train smash on Saturday. I've seen plenty of good horses and cattle and hogs, but I never saw a train wreck, so I said: "Here's where we see it all. Just as well get there a little early and see the whole show."

That idea proved, Bill, that I am a representative Iowan. Sixty thousand other folks had just exactly the same notion. I never see such a jam. It wasn't such a nice day, either, it rained pitchforks on them poor fellers that was running around on the track. But people stayed out and got wet and figured the excitement would dry them off.

That train wreck, Bill, was just a bit over-recommended. I have saw plenty of auto accidents that looked a good deal worse. The engines was just a bit weak in the knees. They did their best, but the most they could work up to was a dizzy speed of about ten miles an hour. At that they must have smashed up their cowcatchers pretty bad, I shouldn't wonder.

You may not believe me, Bill, but there wasn't any street car strike in Des Moines this year. No, sir, we got pretty good service, and if a man felt sorta luxurious he could get in an auto and ride in for a quarter.

But it wouldn't be fair time if something didn't happen. So it rained frequently and hard. Always, or most always, at night, though. Regular washerwomen's weather. A little hard on the folks that was camping out, I expect, but even if they did get damp most every night, they was always some sunshine next day to dry out things.

Folks are funny. Here we had almost seventy thousand people for the train wreck day and less than forty thousand for the live stock parade, the best feature of the fair. And it was a mighty fine parade, too. That is, my oldest boy, Jim, who had a calf in it, tells me it was. I thought I'd better be starting home about Wednesday night, and missed it.

Fairs ought to be educational, and this one certainly was for me. I learned that I'm not near as good a horseshoe pitcher as I thought I was. You know they always thought—leastways I did—up in our neighborhood, that I was pretty fair. Beat most of the boys and pretty easy, too.

Let me tell you something, Bill. As a horseshoe pitcher I'm not even good enough to carry the shoes for Frank Jackson or Lundin or most of those boys. Why, Bill, up our way if a man throws a ringer about every third or fourth shoe, we thinks he's a wonder. When they get a player like that in the tournament at the fair, though, everybody looks like they wondered who left the gate open and what's this stray doin' here? Ringers and double ringers don't mean nothing to those fellows. Only time one looks pleased is when he piles up a double ringer on a double ringer the other fellow has just thrown. Frank Lundin, of New London, got both state and national championship. Frank Jackson was runner up.

There's lots of apples in Iowa this year, Bill. You should have seen the bunch they had up in the agricultural building. I guess this will be a good year to buy up several barrels and put them down cellar and cheat old Doc Barnes out of some more money, eh, Bill?

The county exhibits wasn't quite as strong as last year, but we still worked up quite a little excitement over which was which and whether the judge really knew his business. Polk county got first in the state again, with Guthrie second, West Pottawattamie third, Carroll fourth and Clarke fifth. Webster was first in the north central section, Osceola first in the northern section, West Pottawattamie in the southern and Polk in the south central section.

On the individual farms E. M. Wilson of Panora, J. A. Mason of Carlisle, J. T. Wason of Panora, and John Justice of Ankeny, placed in that order for the highest scoring exhibits. I sorta guess you would call these fellows general purpose farmers. Me, I figure on letting the other fellow do a little work. I don't want to raise everything on one farm. I'll swap a pig or two for some fruit and not run around in circles quite so much.

Speaking of farmers, the state of Iowa isn't so slow. The exhibit of the Board of Control over under the amphitheater was mighty fine. Good looking handwork of all sorts and mighty good looking truck.

Need any lime or your land, Bill? I got a pretty good hunch I do. The college at Ames had a map up in their exhibit showing what soils needed lime and how much, and it looks as if us farmers had better charter a few quarries and a railroad or two and get a little on our farms.

The farm economics exhibit wasn't very cheerful. It said quite a bit about how much some Marshall county farmers didn't make last year, and Marshall county ain't so far away from you and me as it might be, you know that, Bill. It did give helpful ideas, though. I guess as how I'll mention to our shipping association secretary that he'd better take a look at the record keeping system the college is getting out.

Lots of machinery at the fair this year, Bill. In about two more years I figure on coming here and buying some do-funny that'll let me press a button about April 1 and then go to California for the summer and let the machinery do the work. The only trouble then will be that I'll have to start playing golf or something or I'll get too fat. Because I don't intend to stop eating.

Had some trouble with young Peter. He had the notion that he had to see every show and eat something at every stand on the grounds. I went around with him to see that he didn't get hisself hurt or nothing, and I can't see quite how that kid managed to hold all he did. If he'd been a colt, he'd have died squealing and kicking about the second day. Being my youngest boy, he just insisted on going around on the roller coaster again and again and having a wad of candy to chew while he was doin' it. It's lucky kids are tough, or we certainly wouldn't raise many.

We have a big crowd at the fair this year, sixty thousand more than last. A more cheerful crowd, too. Guess we've all got used to low prices and it don't hurt like it used to. And from the way folks bought seats in the grand stand, I guess there must be a few of us who have a spare half dollar or two tucked away somewhere.

You said you was too poor and too busy to come to the fair this year, didn't you, Bill? Bill, listen to me. You ain't that poor and you ain't that busy.

A state fair is one thing a farmer can't afford to miss. He grubs around in the barnyard a good part of the year, and he gets to figuring that he don't amount to much and farming don't amount to much, and what's the use anyway. And then he comes to the fair, and he sees the finest exhibition of live stock and crops in the country, and some of it is his, and he begins to perk up. He walks through machinery hall, and a lot of dressed up young fellows kowtow to him and asks him what does he think of this machine, Mr. Smith? Honest, Bill, one fellow tried to sell me a $5,000 automobile.

The state fair makes you feel better inside. It makes you feel that you belong to a real profession, that you're working on a real job, the most important in the world, and that the men with you are the kind you want to work with. You'll like the stock and the amusements, too, Bill, but that feeling alone is worth quite a bit of railroad fare and hotels and war tax on top of it.

Try it next year, Bill. It's worth the effort. Your wife will like it, and although my woman is feeling sorta fagged out now over the trip, I know mighty well that my rations would be cut pretty short if I told her I wasn't going next year. And I don't believe I'd dare to even hint such a thing before the youngsters, for they enjoyed everything there, from the time we got inside the gate to the time we came away. I almost forgot to tell you how interested they were in boys' and girls' work over the state as exhibited at the fair.

Give my love to all the folks.

YOUR COUSIN JOSHUA.

THE CATTLE SHOW

Iowa may well be proud of her 1922 cattle show. Unfavorable traffic conditions failed to deter the exhibitors who had made entries, and although many herds arrived late, the opening of the judging on Monday found the largest and best balanced display of bovine excellence that has ever graced the Iowa State Fair barns. Shorthorns, Herefords and Aberdeen Angus were out in numbers equal or superior to previous high marks. Polled Shorthorns and Red Polls made as creditable a show of these breeds as has ever been seen at Des Moines. Especially gratifying was the increased numbers and improved quality of the 1922 dairy cattle exhibit, as contrasted with that of last year. Holsteins, Jerseys and Guernseys each helped to raise the standard where it belongs. The show of Ayrshires, Milking Shorthorns and Galloways was lighter than has been seen in some years. A notable feature of the cattle competition was that the animals, as a whole, were more skillfully fitted than has frequently been the case in past years. There were but few animals that lacked noticeably in condition and at the same time there were hardly any that had been overfitted. From the standpoint of the state the most satisfactory feature of the show was that it was predominantly Iowan in make-up.

THE HORSE SHOW

Iowa may justly be proud of the draft horse exhibition at the 1922 fair, since there were but two exhibitors from without the state. A few of the larger breeders were represented, but the show in the main was provided by breeders who showed from one to five or six animals. The actual number of exhibitors showing draft horses was 106, which exceeds the numbers for recent years, while the number of horses present was less than last year. A number of new breeders figured prominently in the prize lists. From almost every angle, the 1922 show was considered as the most significant yet held with respect to the advancement of horse breeding in Iowa. Draft horse exhibits were reduced to some extent by the failure of certain entries to arrive, due to bad railroad conditions. The show of light horses was exceptionally good. Experts declared that a better collection of saddle horses was never assembled at Des Moines. The night horse shows delighted every admirer of horseflesh. Exhibits in the pony section were also highly satisfactory.

THE SWINE SHOW

It would hardly seem like the Iowa State Fair, unless a big show of hogs was in evidence. This year, despite unfavorable shipping conditions, the breeders of the state came to the support of the show in good numbers and showed that Iowa is still the leading hog state of the Union, by putting on a show that has seldom if ever been equalled. There was real interest in the show from the time the first ring was driven out. The benches were filled with spectators who watched the judging carefully.

POULTRY SHOW AT IOWA STATE FAIR

"The best show we have ever had," declared Mr. Warner, superintendent of the poultry show, "because there isn't a huckster in the building; every bird is shown by a breeder."

Mr. E. C. Branch, Harry Atkins and E. D. Monilaw judged the chickens and turkeys and Mr. Oscar Grow the water fowl. "The finest exhibit of Pekin ducks I ever saw, not barring Chicago," Mr. Warner commended, and indeed the ducks of all breeds and varieties were a great show. In the Pekins, there were 12 old drakes, 14 young; 14 old ducks, 13 young. Of other varieties there were White Aylesbury, Colored Rouens, Black Cayuga, Gray Call, White Call, Fawn and White India Runner, Blue Swedish, Black East India, White Crested, Colored Muscovey, White Muscovey, Buff Orpington.

The geese were housed outside of the poultry building; they were good pullers for the poultry show—the finest geese Iowa State Fair has produced. The varieties were Gray Toulouse, White Embden, Gray African, Brown Chinese, White Chinese.

The turkeys were limited to White Hollands. There is nothing prettier than a White Holland turkey, but turkeys show off to poor advantage in the heat of an August show, and even the prize winners were better birds than they looked to be in the coops.

Going through the poultry building it seems as though the same birds in the same coops are there from year to year. This year birds averaged larger than last year; the quality just a little better so far as color and fitting was concerned. There are always some birds of such poor quality that one wonders why the owner did not know his breed well enough to keep them at home. There are always a few that are disqualified. The sending of a disqualified fowl to the poultry show is as often the result of carelessness as of ignorance. We feel sorry when the excellence of an entire pen of fowls must be thrown under suspicion because of disqualification of one. We were glad to note this year that the cause of disqualification was marked on the cards.

One could have taken out all of the first prize winners in the Reds, Barred Rocks and White Wyandottes and still have had a good poultry show. In the White Wyandotte pullet class there were 31 entries. The sweepstakes pullet was a beautiful bird, well matured, well washed and conditioned, and deserving of the honor of the best pullet in the show room. The barring of the Barred Rocks brought forth exclamations of admiration from visitors.

The sweepstakes cockerel had 21 competitors in his class, and was worthy of his honors of the best cockerel in the show room.

We regret that we do not have space for the entire list of premium winners. The poultry show of the club boys and girls was held in poultry hall, and added to the interest shown. The show held good quality, but was not as large a show as the year before. The young folks deserve a great deal of credit for the way their interest in poultry has held up. They are doing good work in the way of study and practice in poultry keeping, and what is more, they are making their parents step lively to get as good returns from the farm flock as the boy or the girl is getting from the club flock.

FARM BUREAU DAY

Farm Bureau Day at the fair every year is becoming a more important affair. The big tent this year was filled to overflowing, with men standing up around the outside. Governor Preus, of Minnesota, gave an eminently common sense talk on co-operative marketing. He cited both Minnesota and Wisconsin as outstanding examples of what can be done in that line. Reviewing co-operative marketing in his own state he went back in the days when farm butter sold for 5 cents a pound—and he was inclined to think that was about all the most of it was worth—comparing conditions of that day with the present, when, as every well-informed person knows, Minnesota creamery butter enjoys a nation-wide reputation for excellence and tops the market at the selling end.

He told what co-operative marketing had done for the potato growers of the state, and in the field of live stock marketing declared that not less than 65 per cent of all stock marketed in Minnesota this year is going through co-operative channels in the form of co-operative live stock commission firms recently established.

The governor was generous. He was ready to concede that Iowa is a great state, second to his own state in agriculture and other things that make life worth while, but he declared the farmers had not yet come to appreciate the advantages of co-operative effort in disposing of their farm products, and he urged them to occupy that field as soon as possible.

Referring to the plan of state ownership of industries, as promoted and practised to some extent in North Dakota, he was of the opinion that it would prove impractical, first, because it is human nature for men to look out for their own interests, and second, because it was certain to become badly involved in partisan politics.

The morning session was opened by a half-hour concert by the Page County Farmers Band, an aggregation of young farmer-musicians under the leadership of the veteran band master, Major Landers. The efforts of the band were thoroughly appreciated, and the musicians were encouraged by liberal applause and many encores.

President Hunt spoke briefly at the beginning of the session. His remarks took an optimistic turn. He reminded the big audience of the many legislative accomplishments, both national and state, in behalf of farming interests, and voiced the opinion that a solution of some of the farmers' most vexing problems of finance and marketing are not very far away.

Ed Cunningham, secretary of the Iowa Farm Bureau Federation, was eagerly greeted. Everyone was anxious to hear what the new president of the Grain Growers' Association had to say about the chances of success for the reorganized company.

The financial affairs of that organization were found in very bad shape, he explained, and time and patience on the part of both creditors and members of the organization will have to be exercised in order that it may win through in its reorganized form. He expressed the belief that it would win out, eventually, and hoped that marketing of grain might be undertaken at no very distant date.

WOMEN'S PART OF FARM BUREAU DAY

The women had a big share in putting over Farm Bureau Day this year.

When the Page County Farmers' Band opened the program there were more women than men in the tent. When the women left in the afternoon following their part on the program in the big tent, the men were heard to remark that they would just as soon have had the women go on.

Mrs. Richardson opened the program by recounting how a committee of five women were appointed last year to help solve National Farm Bureau problems, and she had pleasure in introducing the chairman of this committee, Mrs. Charles Schuttler, of Farmington, Mo.

Mrs. Schuttler built her talk around a quotation of Sir Horace Plunkett that "Agriculture is an industry, a business and a life." She stated that before farmers can have the place belonging to them they must recognize agriculture as interesting and as the most dignified work in which man can engage. She bewailed the too long working day, stating that no nation can exist long as a republic which has to labor too long hours at such hard labor that they are too tired with making a living to make a life.

Her remedy in part was organization.

Mrs. Schuttler reminded her audience that if it had not been for the rise in land values, and the unpaid labor of women and children the American farmer would have found out long ago that he is dead. She compared the work of farming to a foundation and asked: "Of what good is the foundation though it be true and strong unless you rear on it a beautiful structure?"

She stated: The Farm Bureau has untapped reservoirs of power and strength which should be used—the woman power; that there are places where there are few, if any, women attending the meetings. "Every farm woman counts for one vote and one bit of influence; if the Farm Bureau is wise it will use this power to the utmost. Use them not only to make better bread and finer cake, and to uplift the school and church, but use them as a mightly lever behind every sphere of business. As goes the rural home of the United States, so goes the nation. Farm Bureau work is not a job for a lot of women; not a job for a lot of men, it is a job for both working together. We can't draw a line between men's work and women 's work."

Following Mrs. Schuttler's talk, Mrs. Richardson introduced different members of the committee for Iowa appointed last January—one for each congressional district, "to help get the Farm Bureau out of a tight place."

Mrs. Latta spoke briefly on "How I helped my husband put the Farm Bureau work over." Referring to Mrs. Schuttlers "Foundation," Mrs. Latta said: "Every house must have a firm foundation, but it is made of small bricks. We must stand together and ask for more time to study our problems."

We were unable to get the names of the ladies introduced for brief talks. The topics were: "How Can Women Help Sell the Farm Bureau Idea?" The answer was to first sell the idea to themselves, and to know what the idea, history, purpose and accomplishments of the Farm Bureau are. To sell it through existing organizations whether or not they had a home demonstration agent.

The Junior Club work has sold the Farm Bureau idea wherever the work has been undertaken.

One "first chairman" said she thought she should get acquainted with the ladies on her committees so she stationed herself at the door to get the names and addresses of those who came in, and found that one stranger was her neighbor.

In the topic, "Looking Ahead in Farm Bureau Work," the speaker said: "If we are to reach the goal, we must keep our eyes on the goal." She got a laugh with her story of the farmer who sold the cattle which his wife helped to fatten, and brought her home as a gift a pair of overshoes with which she could be dry shod for helping him to feed more cattle. This speaker asked: "Why haggle about organizing the Farm Bureau? Every other business is organized."

ROUND TABLE OF FARM WOMEN

The round table for farm women at the State Fair Farm Bureau conference was by far the snappiest and best that has been held.

Miss Neal Knowles, who is head of the extension work for women, as our readers know, opened the program by presenting a report in the shape of a series of charts, one for each project. These reports, showing as they did the scope of the work being done through the efforts of the Home Demonstration Agents and local leaders, were inspiring, and made one feel the force of the big movement towards better homes and better living which the Farm Bureau and the extension department are pushing. As Miss Knowles said: "When you are making dress forms, cheese, and garments, and keeping time budgets, it is the means to an end, to raise the standards of the home."

She was most enthusiastic about the county project of which we have spoken elsewhere, saying: "We used to be asked for a little of this or that, first one project and then another, and at the end of the year the women did not know they had done anything. Now, they have proved what they have accomplished through co-operation."

The chairman of the round table then called for five-minute reports on the various projects. A map of Iowa with the counties drawn in was on the stage. A thumb tack was pressed into the county of each speaker who responded to the invitation to report; a blue tack for those who had been previously invited to speak and a red tack for those who responded from courtesy from the floor.

It was interesting to note the anxiety of the women present lest their county fail to get a red tack. The reports came in like popping corn; Poweshiek had determined to take up the spending of time project, the farm women having decided they were taking too much time for their work. Their purpose was to establish systematizing of home duties to give more time for home rest and recreation. Nineteen women kept labor records for one week. As a result some saved time by moving their tables nearer the stove; one woman estimated that she had saved 6,532 steps by moving the salt cellar nearer the stove.

Others had moved their "dishpans," "put down linoleum," "bought good egg beaters," "made Sanitas lunch cloths," "fireless cookers," "used pressure cookers for more things," "took up unnecessary rugs." "The project made us think more before taking unnecessary steps."

In reports from the township chairmen one lady said: "We learned where our neighbors live and in what township we live."

Several counties reported 100 per cent organized. Scott county has set a goal for two years' work. In seven months have organized nine classes and had exhibit at state fair.

Humboldt county has had the projects for dress forms, cheese and soap. Now are studying how to vote.

Clinton county has three organized groups of women, and seventy-five books of reports which were used in part as a basis of nutrition work. The clothing budget was also taken up.

Buena Vista had the project of budget making.

Wapello county had two groups of women studying accounts. Mrs. Wilkins, Woodbury county, gave an interesting account of demonstrating the making of Swiss cheese to eight groups of women, forty in a group; the home demonstration agent had a record of 200 more.

Fayette, Dallas, Hancock and Humboldt counties reported briefly.

Clay county reported on rug making, and mentioned specially the making of old-fashioned pulled rugs. They also reported forty-three community clubs and twenty-two girls' clubs.

In Dickinson county twenty clubs have been organized since the first of April.

Cerro Gordo county reported on house furnishing.

Mrs. Wright, of Woodbury county, gave a splendid report on putting on a milk campaign, which we give elsewhere.

Hardin, Webster and Madison earned their red tack with brief reports. Shelby county reported ten girls' clubs.

Franklin county reported a child welfare project with every school district organized. Posters and essays were written in the school through the co-operation of the teachers. Before the county nurse came local leaders weighed and measured the school children.

At their recent Farm Bureau picnic at Hampton some beautiful floats representing club projects won the admiration of everyone.

Mills county claimed to be the best organized county in the state.

Kossuth and other counties reported, but we were unable to get the reports of the last half hour.

We thought as we listened to the reports and admired the concise way in which they were presented, that politicians will do well to recognize the potential power of the Farm Bureau when the women have the 50-50 interest in it which they are beginning to realize is theirs for the taking.

PROJECTS EXHIBITS AT STATE FAIR

We hope everyone saw the exhibits in the home economics class room and lecture hall at the state fair. Our own enthusiasm ran high over the really wonderful work of the women who were responsible for these exhibits, and the quality of the exhibits themselves.

Eleven of the counties with county-wide projects, that is, all townships in the county working on one subject, put on exhibits to show the work done. They also showed the work done on minor projects, or work that is done in some of the townships. The exhibits included maps, reports, posters, exhibits used elsewhere, pictures of clubs, work in school lunches, etc. There were dress forms, demonstrations of the alteration of patterns, and in some of the exhibits the costumes for different figures were shown as indicative of their major project—clothing.

Poweshiek county took as a home management project, "Planned Spending of Time." "Set a hen and get a short cut" was the high light of their collection of pictures. Pictures and photographs of household conveniences were shown, also of groups. Programs for the year from the various township clubs were shown. All of tne programs had the project in mind. Booklets of clippings which related to the topics chosen were made and exchanged.

Clinton county had majored on the five months' clothing project and showed by pictures and forms what was done each month.

Scott county won first prize. Their exhibit was well planned, and their series of charts and surveys were exceptionally good. Their project was nutrition. Jones, Marshall, Franklin and Woodbury counties also took nutrition as their project. Franklin county called attention to their project by spelling out the name of the county in milk bottles. A fortune teller's booth with health fortunes attracted attention.

Beautifying the home grounds was Mahaska's project; the map and model homestead were most interesting and attractive. Most of the admirers looked at the model farm as a really truly farm with trees and grass despite the comment of one who knew: "They dyed their own sponges for trees and they greened their own sawdust for grass."

Junior club work was the project of Johnson county; their exhibit showed photographs of club groups, and gave reports of the work done. In Webster county all but two of the twenty-three townships were in the poultry project. Sixteen out of the twenty-three flocks are record flocks.

Story county had a very excellent exhibit carrying out their project of clothing. The tied and dyed work exhibit in the Story county exhibit attracted much attention.

Woodbury county, "where the tall corn grows," showed a miniature milk booth.

West Pottawattamie had an interesting exhibit showing the suitability of clothes, use of remnants, etc., among other attractive features.

IOWA'S FAIR CAPS THE CLIMAX AGAIN

(From Breeders' Gazette, Chicago, Ill.)

More than 360,000 people—mostly farmers—attended the 68th annual Iowa State Fair in Des Moines last week. Educationally and qualitatively, it was "Iowa's best," and there was plenty of it for every one and every member of the family, whether information, recreation or amusement or all were sought. It was a comprehensive, well-balanced exposition of the banner agricultural state's farm and factory products, with amusements, thrills, excellent orchestral music, and grand opera choruses thrown in to variegate the many-angled program every day and evening during the week. The builders and keepers of this fair know their business; they know what to do, and how to do it; they have the best of materials to work with, and, best of all, they have a citizenry in Iowa that co-operates with them, and appreciates and supports the incomparable net result. The definite and sustained motive of the institution is educational service to farmers and people identified in Iowa with the industries based on agriculture. It succeeds magnificently, and deserves success.

The breeding and feeding of meat-making live stock constitute the basic farm enterprise in Iowa. With its large surplus of corn and forage crops, the state is uniquely dependent on beef cattle and hogs for a local outlet for these meat-making feeds. A state-wide and active interest in improving and increasing these classes of live stock, and sheep as well, is the most important fact seen, heard and read at the fair. A considerable percentage of 1921 corn still is in cribs in Iowa; some of it is going out, and much would go out if the railroads were functioning dependably. Two weeks ago one of the directors of the fair shipped 15,000 bushels to Chicago for approximately 50 cents a bushel. The crop this year will equal and probably exceed the state's ten-year average. There is "a world of feed" in Iowa. In relation to it there is a shortage of beef cattle and hogs in the state. The fall pig farrow is likely to be a record-breaker. Sheep raising and the feeding of sheep and lambs are under way on a greatly expanded scale. Dairying, strongly established, is being improved in efficiency. A revival in draft horse production in many regions of the state is reported by many farmers, and the exhibit in this section at the fair confirmed their views. Iowa is going back rapidly, though not in a wild rush, to more live stock, per capita, and more kinds of live stock. It is therefore going forward to a better, more profitable and more stable agriculture. Its farmers are going to cash at a profit an enormous tonnage of meat, dairy products, grain, poultry, eggs and apples before the year ends.

One does not hear much "hard times" talk in Iowa. On the face of the state today there are no signs of such times. The more one sees and knows of farms and farming in other states and countries the more conspicuous Iowa is as a giant horn of plenty; a great cornucopia—with the accent on the first syllable—which at this season of the year pours out for public inspection a few samples and specimens of its inexhaustible contents. This "little" overflow is known and famous as the Iowa

State Fair. The colossal "show case" in which the public sees the "samples" consists of dozens of buildings which, with the 360-acre site, are valued at more than $1,500,000. On the basis of a 12-year average, beginning with 1910, the fair has paid out annually $73,900 in premiums, been attended by 302,000 people, enjoyed receipts amounting to $234,000, and had 2,000 exhibitors in all departments. The "plant" is one of Iowa's gilt-edged investments. For every dollar invested in it the state owns property valued at $2.15.

The pure-bred beef cattle entries numbered 889, besides 340 "baby" beeves, shown in the boys' and girls' club department; dual-purpose cattle, 120, and dairy cattle, 353. The eight breeds of hogs were represented by 2,550 head, besides 408 shown by boys' and girls' club members. The 800 sheep, besides 85 boys' and girls' lambs, registered an increase in this division. The show of draft horses and geldings and Shetland ponies was stronger and better than last year's, while mules made the largest and best exhibition ever seen in Iowa. Saddle horses were notable in numbers and quality; the harness horse classes were small. Poultry, numbering about 2,800 birds, in addition to a large entry by boys and girls, occupied all the space available in the old building devoted to this interest. Pigeons and rabbits were more numerous than turkeys, geese and ducks. The combined entries in the live stock department equaled if they did not break the fair's record, and under present business and transportation conditions the show was a record-breaker, regardless of its numerical strength.

Automobiles and trucks conveyed thousands of small exhibits from farms and factories to the fair. Iowa is using about 1,000,000 automobiles and 60,000 tractors. Its tax on the former yields an annual revenue of $10,000,000, 90 per cent of which is spent by the state in building, improving and maintaining primary roads. Automobiles and interurban electric roads are largely responsible for the remarkable attendance of Iowa farmers and their families at the fair. On Wednesday several hundred farmers with their families, all identified by inscribed hatbands as from Cass county, arrived in autos, and made a big stir on the grounds. County delegations of this sort represent a new departure of high significance in the social and business life of farm people. Most of the visitors last week went in autos to Des Moines. By Wednesday night the total attendance, despite daily rains and muddy roads, was 297,000—substantially greater than at the corresponding time in 1921—and for the week it totaled 360,000.

In the machinery department the footage of space sold showed an increase of 15 to 25 per cent. Last year the total received for space was $14,000; this year it was $16,000. The increased space was largely occupied by small machines and accessories. Forty-eight companies cooperated with the management in conducting demonstrations of a long list of machines used on farms, highways and railroads, and in dairies, factories and mines. Electricity was the chief motive power; gasoline engines also did a deal of work. Sixty to eighty tractors were in operation. The automobile and trucks show was elaborate as to brands and types. Twenty silos of different construction are permanent fixtures in the machinery division, which was more interesting, instructive and popular than it has ever been before. Manufacturers and distributors who exhibit farm machinery and implements at the fairs are abandoning their old attitude of an impersonal salesmanship, with a purely mercenary interest in farmers. The new attitude is that of personal, interested cooperation with farmers, whom they are spending money to serve. Farming from now henceforward is going to employ so much machinery for so many purposes that the service idea on the part of manufacturers is a heartening augury.

In the agricultural building, captivatingly decorated with gladioli and smilax, sixteen Iowa counties and a dozen individual farms in different sections of the state were represented in booths by composite farm, orchard and garden exhibits, all entered for large cash prizes. Polk county was the highest scoring county, and E. M. Wilson, of Guthrie county, the highest scoring individual.

Exhibits of public interest and value were made by sixteen educational, eleemosynary and penal institutions, under the Iowa State Board of Control.

First-class concerts by a number of bands, abbreviated grand opera (in which 100 people sang) each evening before the grand stand, attractive decorations in the exhibition buildings, and the maintaining of a high standard of floral, vine and shrub landscaping on the grounds, prove that the fair managers are making the fair a cultural influence, as well as a useful institution.

The Chicago Board of Trade was represented by an effective exhibit (seen at the Aurora, Ill., fair two weeks ago) showing a miniature grain elevator in operation, and the principles and details of grain inspection and grading.

Perhaps the most popular human interest feature of the fair was the combined state and national horseshoe pitchers' tournaments, in which more than $2,000 was awarded in prizes. Eighty-one men and boys (some of the latter barely out of their "teens"), mostly from farms, competed in the men's state contest, and 75 from 12 states in the national. A dozen women and girls from four states competed in the women's national. Thousands of people, in the bleachers on either side of the "court," witnessed and applauded the pitchers throughout the five days of the tournament. A dozen or more pitchers in pairs were in action at the same time, each playing on a separate pair of pegs. The clank of the steel shoes, the incredibly high percentage of ringers thrown, the rat-killing earnestness and speed of the players, the activity of the official scorers, the real farm "uniforms" of all shades, patterns and ages worn by the contestants, and the interest manifested by the spectators made the tournaments a memorable success. We should like to see this good, old-fashioned game restored everywhere to its pioneer popularity.

Eighty acres of the grounds are used as a camping site by farm families, who, arriving in autos, spend several days to a week at the fair. The tents used are rented; a store, meat shop and postoffice are on the enclosure. Electric lights, city water, sewage disposal and toilet facilities are provided. From 12,000 to 15,000 people used the camp this year. Many of them spend their annual vacations in this fashion. County agricultural agents and the farm bureau people used a part of the camping field, and held open air meetings.

No additions to the fair's plant have been made since last year. Nearly all the live stock buildings have been outgrown by the expansion of the exhibits, and the grand stand, seating 12,500 persons, is wholly inadequate to meet the public's demands. There were large overflows of hogs and cattle, and the sheep barn was considerably enlarged in pen capacity by a rearrangement of the partitions. A tent 90 by 200 feet was pitched to roof the entries shown by members of the boys and girls' pig clubs. From 600 to 700 additional hog pens could have been used this year. A heavy rain on Tuesday made a muddy mess of the ground under the tent.

Iowa can well afford to provide a first class, permanent building for its boys and girls who show pigs, "baby" beeves, lambs and colts at its state fair. Exhibits made by these future farmers and future farmers' wives should be properly taken care of. We are assured that Iowa has more boys and girls' pig, "baby" beef, lamb, colt and poultry clubs, more active clubs, and more members of these clubs than any other state, and that although the fair has done much to reward and encourage them it should do much more, especially with a view to housing their exhibits. This year these young folk showed 340 "baby" beeves, 408 pigs, 50 lambs, and 600 head of poultry. They would have exhibited 2,000 birds had space been available in the poultry building. They competed for a grand total of $9,000 in prizes.

Secretary A. R. Corey and his associates and staff and Iowa farmers are to be congratulated on having produced a farmers' fair abundantly worthy of Iowa.

FARM BOYS AND GIRLS LEADER

According to Mr. Ivan L. Hobson of the United States Department of Agriculture, the boys and girls' club exhibits, demonstrations and judging features at the Iowa State Fair surpassed anything he had seen at other state fairs up to August 26th. Mr. Hobson was more than gratified at the number as well as of the quality of stock but he said: "The exhibits of boys and girls tops everything here at the fair."

Five hundred and sixty boys and their leaders registered at the boys' dormitory. The whole number attending ran over 600. Two hundred girls and their leaders registered at the girls' dormitory and they were a prize-winning lot.

Among the demonstration teams were 69 in girls' club projects, 30 in poultry, 23 in live stock and corn judging, and a good bunch of boys' live stock demonstration teams. The boys' demonstration work included pig, beef, corn, sheep, garden, spraying, poultry, etc.

The boys and girls' club building was filled with splendidly arranged booths showing the boys and girls' health contest, the girls' garments, canning, approved shoes, etc. Another booth contained the farm record club exhibit referred to elsewhere in a story in this number. At this building Miss Josephine Arnquist, Miss Ida Ahrens, and the remainder of her staff and the girls themselves held forth, and F. P. Reed and assistants looked after the boys.

The poultry exhibit included over 600 birds which were nicely housed in the poultry building and were in charge of Mr. Heifner, state poultry agent. Thirty teams put on some very fine demonstrations in the club building.

The Girls' Tour

One hundred and forty girls and leaders enjoyed a day's trip over Des Moines on Monday. The first stop was at Younker Brothers, where the delegation was entertained royally with a fine luncheon by this company. Mr. Metcalf of Younker Brothers gave the girls a splendid talk, after which they were shown through Younker Brothers department store by Mr. Cunningham. Here they saw dresses, shoes and everything suitable for a club girl to wear and got suggestions on furnishing and decorating the home.

From Younker Brothers they went to Successful Farming for their annual business meeting, and refreshments consisting of ice cream and wafers were served. After discussing the girls' club camp, exhibits and demonstrations for next year, the following officers were elected: Beulah Rogers, Mahaska county, president; Beulah Leslie, Pottawattamie county, vice president; Kathryn Boylin, Hardin county, secretary.

Boys' Club Tour

On Tuesday, 210 boys and their leaders boarded the street cars at the fair grounds for Des Moines. The first stop was at the Register-Tribune. Here they took possession of the office rotunda, sang club songs and gave a few yells of greetings for Iowa's great daily. From there they marched four abreast, all wearing club caps, stopping at Wallace's Farmer, and then on to the Ford plant, where they witnessed the assembling of Fordson tractors, automobiles, and had a very instructive time. Before going through the plant that had a brief rest on the Ford campus for a sing and yells. On reaching Successful Farming for the dinner which was served by Mr. Clyde Herring, the boys had some real eats and a good time. They were served cafeteria style with sandwiches and other things, but it was some time before they were all filled. Many of the boys came back for more sandwiches, Eskimo pies and "red ink." This "red ink" consisted of cherry phosphate served in paper cartons. Some of the boys got away with at least six Eskimo pies.

After the eats, Mr. Allen Walker, assistant manager of Successful Farming, gave the boys a hearty welcome in behalf of Mr. Meredith and the Meredith Publications. E. N. Hopkins acted as toastmaster. Mr. Clyde Herring gave the luncheon and was the chief speaker for the noon meeting.

After the speeches the boys held their annual business meeting and discussed the state fair club work and fair in general, making plans for 1923. After the business meeting a trip was made through the Homestead plant and then to the Y. M. C. A., where the boys had a mighty good swim and a good time. The trip was full of human interest, but lack of space prevents telling the story.

The following officers were elected: Wm. Cihak, president; Elmer Post, vice-president; Ivan Beck, secretary; Henry Patterson, treasurer.

Following are some of the prize winners in the various club contests of the fair. Later numbers will record other winners and the club feature of the Iowa State Fair in more detail.

Wright county won first in the live stock judging, the team consisting of Clarence Clark with a score of 542, Clyde Knight with a score of 530, and Everett Denby with 516.

Franklin county won second with Willie Slee, 526; Clarence Thompson, 521; and Louis Thompson, 500.

Grundy county won third, the team being Walter Schuyhart with a score of 533, Glenn Brown 519, and Carrol Plager, 490.

The individual winners were Clarence Clark, Clarion, with a score of 711; John Well, Waterloo, with a score of 707, and Walter Weiss, Denison, with a score of 704.

In the Livestock Demonstration Work

Adams county poultry team won first and won the trip to Sioux City. Second place was won by Jefferson country dairy team. Third place by the Boone county beef team.

In the girls' club demonstration work Johnston county won the state championship with approved shoes and captured the trip to Sioux City. The team consisted of Louise Slemmons and Irene Schueffler, of Iowa City.

Mahaska county won the canning division and the trip to Sioux City to compete for the French trip. The team consisted of Katherine Bolibaugh, Eddyville, and Beulah Rodgers, Given.

The pig club exhibit included 496 fine purebred porkers in which Marshall county won high honors for having the largest exhibit. It was some job to place the blue ribbons, as competition was keen in almost every class.

There were nearly 400 baby beeves, over twice as many as were shown last year. They were sleek and fat and showed the splendid care they had been given by their owners. The sale included 280 of the calves that were shown and entered and they brought good prices.

And there were club sheep, club heifers and other stock shown by the boys and girls, much of which won ribbons in the open classes.

One of the outstanding features of the contest was the health contest in the club building, conducted by Miss Josephine Arnquist. The girl and boy winner will be sent to Chicago by the Corn Belt Farmer. After this we will have prize club boys and girls as well as club pigs, beeves, etc.

The winners and scores are Esther Brewer, of Lynn county, with a score of 98.05, and Earnest Hostetter, of Grundy county, with a score of 99 per cent.

The Club Dining Hall

The place where club folks assembled together was in the big dining hall where club members and leaders were served with good substantial eats. This was in charge of P. C. Taff, state club leader, assisted by J. H. Hilton, of the club department. The culinary department was in charge of Mrs. Mary Gregg, home demonstration agent of Marshall county. Mrs. Gregg was assisted by farm women of note in Marshall county. The club dining hall proved a success financially and in every other way, thanks to the management.

Everyone enjoyed the songs led by Mr. C. E. Gilman, Y. M. C. A. instructor, the talks, the eats and the fun, and when good-byes were said on Friday noon, many serious good-byes were given.

The club parade and pageant was a huge success, so everybody said. After the parade the club folks enjoyed the program before the grand stand.

FINANCES

At the beginning of the fiscal year, December 1, 1921, there was on deposit with the Treasurer of the Iowa Department of Agriculture $25,279.00. The outstanding indebtedness amounted to $3,700.00, covering the balance due on contract for cattle barn. The receipts from sources other than fair were $11,915.82. The principal sources of these receipts were: Fees Stallion Registration Division, $3,877.00; State appropriation for the support of the Department of Agriculture and insurance on fair ground buildings, $3,400.00; stall rent $1,016.50; pasture rent $496.73; storage $876.50. The other miscellaneous items being fully set out in the itemized statement.

IOWA STATE FAIR

The total receipts of the 1922 fair was $313,259.49. This was an increase of $15,564.24 over the receipts of 1921. This increase was due to an increase in receipts at the outside gates of $3,286; day grandstand $10,704.75; night grandstand $1,456.50. The receipts of the Night Horse Show and all other departments of the fair being about the same as for 1921.

The total receipts from ticket sales amounted to $200,541.00, and from all other sources $112,718.49.

The total cost of putting on the fair was $266,275.11. This was a reduction of $27,849.00 from the cost of the 1921 fair. The cash premiums were reduced $15,906.00 and the other expense of the fair $11,943.00. Deducting from the expense of the fair, the cost of the train wreck, $12,650, which was put on under a contract based on an increase in gate receipts on Saturday over the previous year, there was a reduction of $40,499.00

in the cost of this year's fair compared with last year. This saving which the State Board of Agriculture deemed necessary on the account of the reduction in admission fees, and the change in conditions, was brought about by placing each department of the fair on a budget basis. The budget was prepared early in the year by the board members and the Executive Committee, and adopted by the Board at the March meeting. By the close co-operation of the board members, the Executive Committee and the various Superintendents in charge of the departments, it was possible to keep the total expense of the fair, other than premiums, practically within the budget. Considering that this expense amounted to $161,521.00 and only exceeded the budget $2,258.00, or less than one and one-half per cent, and the fact that this was the first year for the budget system in all departments, the Board has reasons to be pleased with the result of this year's efforts.

The budget for premiums was estimated at $100,000.00. Due, however, to an exceptionally large showing of live stock and other departments having a greater number of entries than usual, a larger percentage of premiums offered was awarded than in previous years. The cash premiums paid amounted to $104,521.65 or $4,521.65 more than the estimated budget. A complete itemized statement of the receipts and disbursements and a number of comparative statements are made a part of this report.

MAINTENANCE OF GROUNDS AND BUILDINGS

The problem of maintaining the State Fair Ground buildings is one of great concern to the board of directors. The appraised value of the buildings and other improvements as shown by the inventory is approximately $1,000,000.00. Figuring on a basis of two and one-half or three per cent for maintenance, which is the basis used by other fairs and institutions of like character, it requires from $25,000 to $30,000 annually to properly maintain the grounds and buildings. For the past four years the board has been expending, from the receipts of the fair, an average of $20,000.00 for this purpose. Due to the fact that a number of the permanent buildings are just reaching a point where the roofs must be replaced, it will require a much larger expenditure during the next few years to properly preserve and maintain this property of the State.

It is reasonable to expect that the Iowa State Fair should be self-supporting in so far as the operating expense of the fair is concerned. It should not be expected, however, to take care of all of the maintenance and minor improvements out of the receipts of the fair. The Board has, therefore, recommended in the budget submitted to the Governor an appropriation of $15,000.00 annually for maintenance, repairs and improvements to buildings on the Iowa State Fair Grounds.

IMPROVEMENTS

The improvements and permanent additions made on the grounds during the last year cost $18,501.75. The principal items were $4,454.35 for completing the cattle barn, $6,534.30 covering cost of transformers, rebuilding switch board and extensions to light system; $1,310.50 covering one-half the cost of permanent booths under the grandstand for the Board of Control exhibit. The other minor items cover permanent improvements to numerous buildings and are set out in detail in the statement attached.

SUMMARY

The balance on hand December 1, 1921, was $24,060.02; the receipts from sources other than fair, $11,915.82. the receipts of fair, $313,259.49, and the grand total receipts $349,235.33.

The disbursements were as follows: Expense other than fair, $12,900.64; maintenance of grounds and buildings, $16,992.66; additions and permanent improvements $18,501.75; expense of fair, $266,275.11, making the grand total disbursements $314,670.16, leaving a balance on hand November 30, 1922, of $34,565.17.

The profit from the operation of fair was $46,984.38. From this there should be deducted the expense of maintenance, $16,992.66, leaving a net profit of $29,991.72. There was also expended for improvements on the grounds during the past year $18,501.75. Deducting this amount from the net profit of the fair leaves a surplus from this year's business of $11,489.97.

ITEMIZED STATEMENT OF RECEIPTS AND DISBURSEMENTS OF THE IOWA DEPARTMENT OF AGRICULTURE AND THE IOWA STATE FAIR AND EXPOSITION FOR THE FISCAL YEAR ENDING NOVEMBER, 30, 1922.

Cash balance December 1, 1921			$ 24,060.02
Receipts from sources other than fair:			
Fees stallion registration division		$ 3,877.00	
State appropriation—support Department of Agriculture		2,400.00	
State appropriation—Insurance on buildings		1,000.00	
Stall rent horse barns		1,016.50	
Pasture rent		496.73	
Storage, autos and trucks		876.50	
House rent		178.50	
Rental, sale ring		390.00	
Labor, stock sales		63.75	
Cavalry, current and expense		36.40	
Kindling sold		9.00	
Insurance on Stock Pavilion		68.47	
Insurance on Horse Barn No. 2		69.26	
Poultry coop rental		131.75	
Use of grounds		278.00	
Insurance—dividends		7.75	
Refund, over-payment coal bill		15.82	
Refund, Hampshire specials		100.00	
Painting Mid-Way entrance		50.00	
Transformers—sold		252.00	
Lawn mower—sold		50.00	
"Conscience money," admissions		3.00	
Postage sold		10.00	
Damage to electric lamps		7.50	
Interest on account		527.89	
Total receipts other than fair			$ 11,915.82
Receipts from State Fair:			
Stall rent, horse department		$ 2,062.00	
Saddle horse stake, entry fees		480.00	
Draft Horse Futurity, entry fees		466.00	
Stall rent, cattle department		3,659.50	
Pen rent, swine department		4,064.00	
Pen rent, sheep department		493.00	
Coop rent, poultry department		624.75	
Space rental, Poultry Building		375.00	
Machinery Department:			
Floor space Machinery Hall	$ 9,576.42		
Floor space Power Hall	1,000.00		
Floor space Shaver Building	250.00		
Outside ground space	1,917.53		
		$ 12,743.95	
Agricultural Building, concessions and space		2,120.00	
Dairy Department, ice cream sales		2,798.73	
Exposition Building, concessions and space		3,047.50	
Concessions and privileges:			
General concessions	$ 28,822.00		
Wortham Shows (percent)	10,514.34		
Grandstand concession (percent)	1,701.35		
Score card privilege (percent)	811.56		
Giant Coaster (percent)	1,691.76		
Old Mill (percent)	1,357.80		
Sig Haugdahl racing car (percent)	31.78		
Delivery permits and tickets	719.00		
		$ 45,649.59	
Light and power:			
Current sold	$ 1,075.75		
Labor installing	131.15		
Lamps sold	20.00		
		$ 1,226.90	
Speed Department:			
Entry fees		$ 4,233.00	
Western Breeders' Futurity fees		1,895.00	
Forage sold		$ 10,285.28	
Association special premiums		13,622.01	
Advertising in premium list		1,492.58	

Horseshoe tournament entry fees		268.00	
Field meet entry fees		7.75	
Day Nursery fees		111.63	
Tent rental		75.00	
Refund, over-payment of premiums		25.00	
Refund, express charges		25.45	
One-half cost printing speed program		281.18	
One-half Live Stock Sanitation payroll		116.45	
Receipts from telephone tolls		469.24	
Total receipts of fair other than ticket sales		$112,718.49	
Ticket sales:			
Outside gates	$122,246.75		
Day grandstand	42,724.25		
Night grandstand	31,488.25		
Night Horse Show	4,081.75		
Total ticket sales		$200,541.00	
Total receipts of fair			$313,259.49
Grand total receipts			$249,235.33

DISBURSEMENTS.

Disbursements other than fair or improvements:			
Stallion Registration Division:			
Salary, chief clerk	$ 2,199.98		
Salary, clerk and stenographer	1,245.00		
Printing and supplies	10.16		
		$ 3,455.14	
Publicity Department:			
Salary, director	$ 1,166.65		
Salary, clerk and stenographer	475.00		
Printing, Greater Iowa	527.75		
Postage, Greater Iowa	9.25		
Supplies, wrapping paper, etc.	5.83		
Drayage, Greater Iowa	2.50		
Half tones	16.49		
		$ 2,203.47	
Expense of 1921 fair paid during 1922:			
Sheep shearing contest	$ 33.00		
Advertising bills	92.12		
Premiums, 1921 fair	157.00		
Labor, State Garden	18.60		
Refund stall and pen rent	42.00		
Loan Art Exhibit	95.00		
Refund concessions	25.00		
Banners and medals	20.00		
Supplies, Fair Grounds	8.08		
Judge—Floriculture Department	20.00		
Expense—Pure Bred Sire Exhibit	30.80		
Freight—Educational Department	8.40		
Printing art circular	51.90		
Scholarship, 1921	25.00		
		$ 626.90	
State Agricultural Convention		1,177.92	
Expense of live stock sales		326.31	
Hauling poultry coops		38.75	
Balance printing 1920 catalog		1,060.08	
State College scholarships, 1919		250.00	
Subscriptions for newspapers		38.50	
Dues, commercial organizations		102.00	
Insurance premiums on buildings		3,109.64	
Addressograph plates		1.13	
Protectograph		45.00	
Binding award books		28.25	
Premium, Secretary's bond		25.00	
Floral sprays		36.43	
Shipping transformers		13.25	
Typewriter		89.10	
June race meeting expense		65.00	
Sunday School picnic expense		201.41	
Engineers' picnic expense		7.36	
Total expense other than fair			$ 12,900.64

Maintenance grounds and buildings:

Landscape work	$ 504.53
Water system repairs	611.87
Race track work	697.75
Ground drayage	200.25
Cleaning buildings	346.50
Hauling manure	301.33
Cleaning grounds	386.75
Truck and auto repairs	802.29
Screen and window repairs	73.25
Cutting and hauling wood	153.50
Putty, glass, etc	43.67
Tool repairs	84.84
Water service except August and September	450.16
Shrubs and trees, pruning	613.50
General repairs	494.76
Mule team, feed, etc	155.34
Superintendent, assistants, foremen and watchmen	3,201.50
Electric service	1,077.30
Cattle barn repairs	32.15
Putting up ice	7.50
Gas and oil for trucks and autos	1,097.90
Fencing plants and flowers	92.25
Sub-station repairs	3.80
Light system repairs	691.80
Horse barn No. 2 repairs	488.23
Speed barn repairs	49.44
Swine pavilion repairs	130.64
Temporary hog pens, repairs	48.50
Road oil	518.60
Oiling streets	31.75
Streets and roads, dragging	91.50
State garden	37.50
Live stock pavilion repairs	21.46
Mowing grass and weeds	823.69
Agricultural Building, repairs	272.75
Reservoir filling	39.75
Drainage system repairs	7.50
Spring tank repairs	16.50
Amphitheater repairs	94.96
Freight on paint	1.86
Filling horse barn	62.00
University Avenue entrance repairs	10.25
Subway repairs	15.25
Lumber shed repairs	35.50
Lumber for general repairs	271.28
Horse barn No. 7, repairs	115.10
Machinery Hall, repairs	404.04
Women's and Children's Building, repairs	65.60
Band stand, repairs and painting	81.25
Boys' and Girls' Club dining hall, repairs	98.35
Brick horse barn, repairs	25.00
Boys' dormitory, repairs	17.00
Camp ground toilets	80.34
Telephone station, repairs	64.48
Mid-Way entrance	22.00
Administration Building, repairs	53.83
Power Hall, repairs	6.25
Walks, repairing	28.00
Paddock, repairs	5.75
Grand Avenue entrance, repairs	12.25
Flag poles	10.88
Farm Bureau Building, repairs	1.75
Dodd & Struthers Building, repairs	17.75
Nurse cow barns, repairs	12.00
Bleachers, repairs	229.65
Forage barn, repairs	78.00
Lawn seat, repairs	80.05
Garage, repairs	9.35
Blacksmith shop, repairs	10.50
Electric fan, repairs	4.50
Club Building, repairs	7.00
College exhibit booth, repairs	28.00
Amphitheater chairs, repairs	5.25
Turnstile, repairs	39.15
Exposition Building, repairs	6.25
Poultry Building, repairs	8.97
Valley Junction dining hall, repairs	35.70
Walnut Street entrance, repairs	35.20

Shaver Building, repairs		40.84	
Oil station, repairs		1.25	
Brick dining hall, repairs		8.10	
Cattle pen, repairs		3.40	
Repairs on signs		23.48	
Repairing fences		23.00	
Total maintenance grounds and buildings			$ 16,992.66
Additions and permanent improvements:			
Light system, transformers and extensions		$ 3,590.55	
Sub-station switchboard		2,943.75	
Electric lamps		1,117.92	
Street grading and gravel		732.95	
Fair ground equipment:			
Close to Nature House	$ 100.00		
Equipment Club Dining Hall	66.79		
Flower vases	5.00		
Coin turnstiles	588.00		
Electric fans	215.25		
Used Ford truck	191.00		
Uniforms for night show	13.35		
Pumps and hydrants	17.56		
Furnishings, Administration Building	91.15		
		$ 1,288.10	
Tools and implements:			
Push carts	$ 52.00		
Mower	67.47		
Truck top	8.40		
Miscellaneous small tools	282.88		
		$ 410.75	
Brick cattle barn:			
Balance on general contract	$ 3,857.35		
Brick and other material	72.50		
Screens	44.00		
Filling	480.00		
		$ 4,454.35	
Farm house chicken coop		2.00	
Walnut Street entrance material		39.92	
Swine pavilion, wash rack		118.36	
Live stock pavilion, box seats		89.75	
Boys' and Girls' Dining Hall		188.07	
Building fence		38.25	
Hospital Building furnishings		20.56	
Sewer system extension		20.52	
State institution booths in grandstand		1,310.50	
Horseshoe pitching bleachers		117.88	
Boys' and Girls' Club Building		93.38	
College exhibit booths		105.87	
Auto parking posts		24.30	
Cattle pens		110.29	
Grand opera stage		276.00	
Agricultural Building		77.90	
Sheep barn		14.41	
Temporary hog pens, lumber		324.74	
Cots and mattresses		400.00	
Planting trees		17.00	
Canvas, Amphitheater		292.68	
Women's and Children's Building, stage curtains		90.50	
Brick horse barn		80.50	
Old reservoir, filling		35.00	
Worthington Pump Building purchased		75.00	
Total additions and improvements			$ 18,501.75

EXPENSE OF FAIR.

Expense of fair other than premiums:			
Executive Committee meetings		$ 967.54	
Special Committee meetings		2,080.81	
Express, telegraph and telephone		694.81	
Postage		1,854.18	
Printing:			
Duplicate letters	$ 27.90		
Stationery, Board members	244.74		
Four entry books	74.00		

Educational premium list	85.00	
Voucher covers	17.90	
Stationery and envelopes	128.20	
Application blanks, Machinery Department	16.80	
Receipt books	38.25	
Newspaper advertising blanks	3.85	
Horseshoe pitching contest classification	86.90	
Horseshoe pitching letter heads	40.00	
Horseshoe pitching contest numbers	47.25	
Horseshoe pitching programs	193.00	
Circulars, Machinery Department	10.00	
Mimeograph letter paper	92.10	
Premium list	1,834.40	
Advertising contracts	8.50	
Feed barn order books	24.50	
Freight and release blanks	7.00	
Variety cards	20.00	
Invitations and envelopes	43.00	
Speed programs	97.00	
Baby Health classification	22.00	
Baby Health programs	139.00	
Baby Health number cards	8.80	
Baby Health score cards	39.00	
Graphic and Plastic Arts classification	11.75	
Address labels	14.75	
Stall assignment cards	8.00	
Camp circulars	26.75	
Requisition blanks	8.75	
Entry tags	89.30	
Entry blanks	163.60	
Official program and catalog	966.60	
Ticket requisition blanks	36.95	
Placards	39.00	
Premium warrant receipts	4.00	
Electric wiring and current contracts	12.25	
Ring and stall cards	273.75	
Journal receipt book	70.00	
Miscellaneous	34.25	
Coop cards	24.00	
Horse show programs	76.00	
Horse show cards	5.00	
Special programs	21.50	
Premium tags	49.90	
Superintendent order books	15.50	
Boys and girls' premium list	140.00	
Premium and expense warrants	51.33	
Tickets for all gates and shows	1,434.80	
Agricultural premium list	54.00	
Concession contract books	54.40	
Livestock circulars	66.00	
Poultry shipping tags	18.25	
Auto parking tickets	2.75	
Auto tally sheets	36.00	
Statement of premium account	10.50	
Futurity blanks, circulars and receipts	54.15	
Balance sheets	42.00	
Butter display cards	6.50	
County fair lists	7.50	
Plats of grounds	5.86	
Pig club signs	10.00	
Catalog and index cards	20.75	
Sale tags	12.00	
Premium statements	19.50	
Stall cards	24.25	
Insurance riders	11.25	
Race program	427.40	
		$ 7,809.88
Advertising:		
Country newspapers	$ 4,944.19	
Plate for country papers	1,394.25	
Des Moines daily papers	6,389.99	
Daily papers outside Des Moines	1,100.32	
Agricultural and live stock papers	2,059.33	

Horse papers and speed program advertising	460.30	
Miscellaneous papers	172.79	
Director of Advertising, salary five months	833.31	
Clerk and stenographer salary	261.33	
Postage Greater Iowa	30.00	
Printing Greater Iowa	860.00	
Drayage Greater Iowa	13.50	
Hangers and window cards	732.00	
Heralds and hand bills	215.00	
Billboard paper	183.45	
Billboard posting service	1,144.88	
Distributing window cards and programs	35.00	
Cuts and electros	313.91	
Art work, drawings, etc	139.33	
Mailing tubes	55.83	
Press clippings	76.42	
Die hubs for Des Moines Post Office	73.50	
Date sheets and street car signs	86.00	
Circulars and folders	60.75	
Posting programs in street cars	70.00	
Beauty contest expense	1,080.55	
Daily programs	80.60	
		$ 22,866.53
Music and attractions:		
Night show "Mystic China"	$ 7,714.26	
Fischer Flying Circus	700.00	
Thaviu's Band and Grand Opera	6,200.00	
Argonne Post Band	1,975.00	
Fort Dodge Military Band	2,050.00	
Murray's Family Orchestra	200.00	
T. Fred Henry's Orchestra	492.00	
Page County Farmers' Band	1,000.00	
Hippodrome acts	7,000.00	
Drum Corps	425.00	
Raub Balloon act	250.00	
Relay and Hippodrome races	1,800.00	
		$ 29,806.26
Train wreck (per cent of gate)		12,650.00
Supplies and stationery (office)		440.30
Light and power current		1,561.04
Light and power labor		1,311.91
Water service, August and September		690.35
Refund, stall rent, tickets, etc		391.00
Forage purchased for feed barn		7,932.40
Salary Secretary and office help		10,707.41
Board meetings		1,304.35
Assistants and foremen		298.50
Scavenger work, toilets and garbage		750.53
Race track work		96.68
Cleaning grounds		1,708.92
Cleaning buildings		477.70
Cleaning barns and pens		1,442.57
Decorating buildings		1,900.50
Plants and flowers		857.97
Ground supplies:		
Brooms	$ 9.75	
Toilet paper and towels	182.75	
Cheese cloth	18.00	
Soap	26.40	
Mops	16.74	
Mop pails and wringers	5.50	
Sweeping compound	12.50	
Stock yard canes	24.00	
Plates and doilies	7.65	
Cook suits (two)	4.50	
Miscellaneous supplies	37.96	
		$ 345.75
Cups and medals		1,002.30
Premium ribbons and badges		2,163.33
Signs and placards		768.90
Payroll and expense Educational Department		266.40
Payroll and expense Horseshoe Tournament		394.69
Payroll Boy Scout ushers		1,150.00
Payroll Machinery Department		848.22

Payroll Agricultural Department		920.00	
Payroll Public Safety Department		3,337.20	
Payroll Horticultural Department		576.60	
Payroll Swine Department		962.50	
Payroll Sheep Department		657.50	
Payroll Cattle Department		1,403.75	
Payroll Admissions Department		4,574.35	
Payroll Concession Department		2,457.00	
Payroll Textile and China Department		471.00	
Payroll Treasury Department		2,891.00	
Payroll Horse Department		1,657.00	
Payroll Speed Department		989.50	
Payroll Boys and Girls' Club Department		1,113.14	
Payroll Baby Health Department		1,184.18	
Payroll Graphic and Plastic Art Department		461.42	
Payroll Day Nursery		159.86	
Payroll property men and light operators		278.20	
Payroll Poultry Department		399.50	
Payroll live stock sanitation		159.00	
Payroll ticket auditing		325.00	
Payroll Campers' Headquarters		204.00	
Payroll Boys and Girls' Judging Contest		60.00	
Payroll Rabbit Department		95.00	
Payroll Awards Department		134.50	
Expense Field Meet		217.45	
Expense Women's Building Program Committee		520.73	
Payroll Cow Testing Association exhibit		146.30	
Payroll Dairy Department		287.95	
Dairy and Ice Cream Department:			
Ice cream	$ 1,416.20		
Payroll ice cream stand	178.50		
Sanitary dishes and supplies	86.77		
		$ 1,681.47	
Model garden		44.00	
Commission soliciting premium list advertising		8.75	
Horseshoe pitching courts		130.97	
Freight on exhibits, etc		33.44	
Payroll Drayage Department		448.48	
Tan bark for show ring		382.77	
Dining hall screens		3.75	
Payroll concessions grounds		69.00	
Poultry coops, labor		16.00	
Whitewashing buildings		350.00	
Auto races, prizes and bonus		6,600.00	
Calcium chloride for track		178.13	
Damages, medical services, etc		202.00	
Announcer		125.00	
Matron, Women's and Children's Building		40.00	
Wood and sawdust		221.00	
Expense Club Dining Hall		262.79	
Meals for guests and State Day banquet		624.25	
General labor during fair		1,518.11	
Turnstiles, mechanics		156.75	
Gas and oil during fair		744.74	
Janitors, Administration Building		397.88	
Janitors, Women and Children's Building		347.38	
Miscellaneous carpenter work during fair		695.62	
Forage used by departments		251.95	
Rental, tents, chairs, bedding, etc		1,360.36	
Expense Sunday School program		25.00	
Temporary hog pens		20.50	
Photographs		92.00	
Typewriter rental		4.00	
Premium on bond and hold-up insurance		118.00	
Piano tuning and rental		53.50	
Miscellaneous expense		7.56	
American Trotting Association, dues		105.00	
Dining Hall, coal		67.95	
Sheep for shearing contest		30.00	
International Association of Fairs, dues		50.00	
Mid-West Fair Circuit		100.00	
Total expense of fair other than premiums			$161,753.46
Cash premiums paid:			
Horses		$ 19,265.00	
Cattle		30,005.00	
Swine		7,194.00	
Sheep		3,912.00	
Goats		245.00	

Poultry	1,238.50	
Rabbits	65.25	
Agriculture	8,695.00	
Culinary	815.00	
Honey and Bees	510.00	
Dairy	722.00	
Horticulture	2,621.50	
Floriculture	235.00	
Textile, China, etc.	1,336.50	
Graphic and Plastic Arts	589.00	
Radio	60.00	
Educational	741.50	
Boys and Girls' Club Department	6,155.00	
Boys and Girls' Judging Contest	625.00	
Boys and Girls' Team Judging Contest	180.00	
State Spelling Contest	160.00	
Horseshoe Pitching Contest	1,380.00	
Speed	17,771.40	
Total premiums paid		$104,521.65
Total expense of fair		266,275.11
Grand total disbursements		$314,670.16

SUMMARY OF RECEIPTS AND DISBURSEMENTS AND RECONCILIATION OF ACCOUNT WITH THE TREASURER.

RECEIPTS.

Cash balance December 1, 1921		$ 24,060.02
Receipts from sources other than fair		11,915.82
Receipts of fair other than ticket sales	$112,718.49	
Receipts from ticket sales	200,541.00	
Total receipts of fair		313,259.49
Grand total receipts		$349,235.33

DISBURSEMENTS.

Disbursements other thain fair		$ 12,900.64	
Maintenance of grounds and buildings		16,992.66	
Additions and permanent improvements		18,501.75	
Expense of fair other than premiums	$161,753.46		
Cash premiums paid	104.521.65		
Total cost of fair		266,275.11	
Grand total disbursements			$314,670.16
Balance on hand November 30, 1922			$ 34,565.17
Warrants outstanding			959.50
Cash balance in treasury November 30, 1922			$ 35,524.67

COMPARATIVE STATEMENT OF TICKET SALES AT OUTSIDE GATES, DAY AND NIGHT GRANDSTAND AND NIGHT HORSE SHOW FOR THE 1921 AND 1922 IOWA STATE FAIRS.

General Admission	1922 Fair			1921 Fair		
	Price	No. Sold	Total Value	Price	No. Sold	Total Value
Outside Gates:						
General Admission	$ .50	206,556	$103,278.00	$ .75	106,870	$ 80,152.50
Round-Up	.50	702	351.00	.75	528	396.00
After 6 P. M.	.25	20,149	5,037.25	.25	21,422	5,355.50
Half Fare	.25	29,486	7,371.50	.25	20,381	5,095.25
Taxicab—week	5.00	78	390.00	5.00	118	590.00
Exhibitors	3.00	1,917	5,751.00	3.00	2,018	6,054.00
Solicitors	4,00	17	68.00			
Sunday, 1921				.50	11,117	5,558.50
Soldiers, 88th Division				1.00	1,767	1,767.00
Campers				3.00	2,427	7,281.00
Automobile				.50	13,422	6,711.00
Total outside gates			$122,246.75			$118,960.75
Day Grandstand:						
Box Seats	$1.00	2,756	$ 2,756.00	$1 00	2,941	$ 2,941.00
Reserved Lower Half	.75	15,718	11,788.50	.75	16,249	12,186.75
Reserved Upper Half	.50	23,839	11,919.50	.50	18,931	9,465.50
Quarter-stretch	.50	904	452.00	.50	487	243.50
Children, Paddock	.25	2,657	664.25	.25	1,507	376.75
Cash, Turnstiles Paddock	.50	30,288	15,144.00	.50	13,612	6,806.00
Total day grandstand		76,162	$ 42,724.25		53,727	$ 32,019.50
Night Grandstand:						
Box Seats	$1.00	2,377	$ 2,377.00	$1.00	2,560	$ 2,560.00
Reserved Lower Half	.75	13,663	10,247.25	.75	14,194	10,645.50
Reserved Upper Half	.50	18,004	9,002.00	.50	15,583	7,791.50
Children, Paddock	.25	2,024	506.00	.25	1,731	432.75
Cash, Turnstiles Paddock	.50	18,712	9,356.00	.50	17,204	8,602.00
Total night grandstand		54,780	$ 31,488.25		50,272	$ 30,031.75
Night Horse Show:						
Box Seats	$1.00	688	$ 688.00			
Reserved seats	.50	5,924	2,962.00	$ .50	7,049	$ 3,524.50
Standing room	.25	1,727	431.75	.25	688	172.00
Total Night Horse Show		8,339	$ 4,081.75		7,737	$ 3,696.50
Total Ticket Sales			$200,541.00			$184,708.50

SUMMARY

	1922	1921	Increase	Decrease
Outside Gates	$122,246.75	$118,960.75	$ 3,286.00	
Day Grandstand	42,724.25	32,019.50	10,704 50	
Night Grandstand	31,488.25	30,031.75	1,456.50	
Night Horse Show	4,081.75	3,696.50	385.25	
Total ticket sales	$200,541.00	$184,708.50	$ 15,832.50	

COMPARATIVE STATEMENT OF RECEIPTS 1922 AND 1921 STATE FAIRS.

	1922 Fair	1921 Fair	Increase	Decrease
Stall rent, horse department	$ 2,062.00	$ 2,001.68	$ 60.32	
Draft horse futurity	466.00	450.00	16.00	
Saddle horse stakes, entry fees	480.00	860.00		$ 380.00
Stall rent, cattle department	3,659.50	2,885.00	774.50	
Pen rent, swine department	4,064.00	3,897.50	166.50	
Pen rent, Sheep department	493.00	459.00	34.00	
Coop rent, poultry department	624.75	690.25		65.50
Space rent, poultry department	375.00	267.00	108.00	
Machinery department, space rent	12,743.95	12,402.20	341.75	
Agricultural Building, space rent	2,120.00	2,080.00	40.00	
Dairy department, ice cream sales	2,798.73	1,953.60	845.13	
Exposition Building, space	3,047.50	3,325.00		277.50
Concessions	45,649.59	45,868.00		218.41
Light and power sold	1,226.90	1,764.58		537.68
Speed department, entry fees	4,233.00	3,957.50	275.50	
Speed department, W. B. futurity	1,895.00	1,782.20	112.80	
Forage sold	10,285.28	10,942.07		656.79
Association special premiums	13,622.01	15,062.44		1,440.43
Advertising in premium list	1,492.58	1,605.60		113.02
Telephone collections	469.24	423.31	45.93	
Miscellaneous receipts	910.46	309.82	600.64	
Total receipts other than ticket sales	$112,718.49	$112,986.75	$3,421.07	$3,689.33
Ticket Sales:				
Outside gates	$122,246.75	$118,960.75	$3,286.00	
Day grandstand	42,724.25	32,019.50	10,704.75	
Night grandstand	31,488.25	30,031.75	1,456.50	
Night horse show	4,081.75	3,696.50	385.25	
Total receipts of fair	$313,259.49	$297,695.25		
Net increase		15,564.24		$15,564.24
	$313,259.49	$313,259.29	$19,253.57	$19,253.57

COMPARATIVE STATEMENT OF PREMIUMS PAID 1922 AND 1921 FAIRS.

	1922 Fair	1921 Fair	Increase	Decrease
Horse	$ 19,265.00	$ 24,480.00		$ 5,215.00
Cattle	30,005.00	34,412.75		4,407.75
Swine	7,194.00	6,994.00	$ 200.00	
Sheep	3,912.00	4,587.00		675.00
Goats	245.00	248.00		3.00
Poultry	1,238.50	1,351.75		113.25
Rabbits	65.25	145.25		80.00
Agriculture	8,695.00	11,016.00		2,321.00
Culinary	815.00	811.00	4.00	
Honey and Bees	510.00	531.00		21.00
Dairy	722.00	722.00		
Horticultural	2,621.50	2,305.00	316.50	
Floricultural	235.00	1,733.80		1,498.80
Textile, China, etc.	1,336.50	1,344.50		8.00
Graphic and Plastic Arts	589.00	604.00		15.00
Radio	60.00		60.00	
Educational	741.50	815.00		73.50
Boys and Girls' Club Department	6,155.00	6,045.00	110.00	
Boys and Girls' Judging Contest	625.00		625.00	
Boys and Girls' Team Judging Cont.	180.00	225.00		45.00
State Spelling Contest	160.00	200.00		40.00
Horse Shoe Pitching Contest	1,380.00	350.00	1,030.00	
Speed	17,771.40	21,506.59		3,735.19
Total	$104,521.65	$120,427.64	$ 2,345.50	$ 18,251.49
Total decrease	15,905.99		15,905.99	
	$120,427.64	$120,427.64	$ 18,251.49	$ 18,251.49

STATEMENT OF EXPENSE OF 1921 AND 1922 FAIRS, ALSO BUDGET FOR 1922 FAIR WITH EXCESS OR SAVING FROM ESTIMATED BUDGET.

	Expense 1921 Fair	Expense 1922 Fair	Budget 1922 Fa	Excess of Budget	Saving from Budget
Committee meetings	$ 4,088	$ 3,048.35	$ 3,000	$ 48.35	----------
Postage	1,722	1,854.18	1,600	254.18	----------
Printing	10,500	7,809.88	9,000	----------	$ 1,190.12
Advertising	23,317	22,866.53	23,000	----------	133.47
Attractions	38,348	29,806.26	30,000	----------	193.74
Auto races	6,600	6,600.00	6,600	----------	----------
Light and power	2,995	2,872.95	8,000	----------	127.05
Water	695	690.35	700	----------	9.65
Forage	10,170	7,932.40	10,000	----------	2,067.60
Salaries, Secretary's office	10,793	10,707.40	10,525	182.40	----------
Decorating buildings	1,686	1,900.50	1,400	500.50	----------
Board meetings	1,299	1,304.35	1,300	4.35	----------
Treasurer's department	3,967	2,891.00	2,700	191.00	----------
Admissions department	6,318	4,574.35	4,775	----------	200.65
Boy Scout ushers	1,348	1,150.00	1,050	100.00	----------
Police department	4,148	3,337.20	8,500	----------	162.80
Concessions department	3,124	2,457.00	2,500	----------	43.00
Horse department	1,994	1,657.00	1,500	157.00	----------
Cattle department	1,575	1,403.75	1,250	153.75	----------
Swine department	1,019	962.50	750	212.50	----------
Sheep department	654	657.50	500	157.50	----------
Poultry department	490	399.50	400	----------	.50
Machinery department	1,560	848.22	850	----------	1.78
Agricultural department	1,218	920.00	750	170.00	----------
Horticultural and Floricultural	589	576.60	450	126.60	----------
Speed department	1,316	989.50	970	19.50	----------
Exposition department	665	471.00	500	----------	29.00
Educational department	334	266.40	250	16.40	----------
Ticket auditing department	479	325.00	350	----------	25.00
Boys and Girls' club department	1,292	1,113.14	900	213.14	----------
Boys and Girls' Judging contest	102	60.00	75	----------	15.00
Baby health department	1,332	1,184.18	950	234.18	----------
Program W. & C. building	1,038	520.73	800	----------	279.27
Day nursery	222	159.86	200	----------	40.14
Campers headquarters	387	204.00	175	29.00	----------
Auto parking	280	----------	----------	----------	----------
Property men	447	278.20	400	----------	121.80
Art department	285	461.42	225	236.42	----------
Awards department	92	134.50	100	34.50	----------
Janitors	786	745.26	700	45.26	----------
Dairy department	1,723	1,969.42	1,500	469.42	----------
Plants and flowers	889	857.97	750	107.97	----------
Premium ribbons and badges	2,525	2,163.33	2,000	163.33	----------
Tents, chairs, bedding, etc.	1,135	1,360.36	1,000	360.36	----------
Cups and medals	788	1,002.30	750	252.30	----------
Signs	746	768.90	500	268.90	----------
Miscellaneous items of expense	16,616	14,840.21	12,650	2,190.21	----------
Train wreck (per cent of gate)	----------	12,650.00	12,650	----------	----------
Total expense other than premiums	$173,696	$161,753.45	$159,495	$ 6,899.02	$ 4,640.57
Premiums	120,427	104,521.65	100,000	4,521.65	----------
Totals	$294,123	$266,275.10	$259,495	$11,420.67	$ 4,640.57

Misc. expense of fair in excess of budget	$ 2,258.45
Cash premiums in excess of budget	4,521.65
Total cost of fair in excess of budget	$ 6,780.10
Total reduction in cost of 1922 fair from 1921	$27,847.90

SPEED DEPARTMENT IOWA STATE FAIR AND EXPOSITION, 1922.

In Accordance With the Rules and Advertised Conditions Under Which the Races Were Conducted, All Entrance Fees Were Added to the Purses.

HARNESS RACES

Class	Amount Offered	Entry Fees Received	Amount Paid Out	Net Cost	Number Starters
*2:14 trot—"The Western"	$ 1,200.00	$ 972.00	$ 2,172.00	$ 1,200.00	10
*2:13 pace—"The Hawkeye"	1,200.00	942.00	2,142.00	1,200.00	7
*3 year old trot	400.00	152.00	496.80	344.80	3
*3 year old pace	300.00	138.00	438.00	300.00	5
2:25 trot	700.00	175.00	875.00	700.00	7
2:20 trot	700.00	170.00	870.00	700.00	8
2:16 trot	700.00	250.00	950.00	700.00	10
2:13 trot	700.00	110.00	810.00	700.00	5
2:10 trot	700.00	75.00	697.50	622.50	3
2:20 pace	700.00	280.00	980.00	700.00	8
2:16 pace	700.00	185.00	885.00	700.00	8
2:11 pace	700.00	80.00	780.00	700.00	4
2:09 pace	700.00	120.00	820.00	700.00	6
Total	$ 9,400.00	$ 3,649.00	$12,916.30	$ 9,267.30	84

*Early Closing Events.

FUTURITIES

Class	Amount Offered	Entry Fees Received	Amount Paid Out	Net Cost	Number Starters
W. B. Futurity No. 9 (Trotting Division)		$ 1,338.50	$ 1,388.60	$ 250.10	4
W. B. Futurity No. 9 (Pacing Division)		556.50	591.50	135.00	3
W. B. Futurity Bonus			‡ 300.00		
Total		$ 1,895.00	$ 2,280.10	$ 385.10	7

‡Bonus paid for Western Breeders' Futurity.

RUNNING RACES

Class	Amount Offered	Entry Fees Received	Amount Paid Out	Net Cost	Number Starters
1 mile run	$ 200.00	$ 20.00	$ 220.00	$ 200.00	4
6 furlong run	175.00	30.00	205.00	175.00	6
5 furlong run	150.00	35.00	185.00	150.00	7
4½ furlong run	125.00	25.00	150.00	125.00	5
1 mile run	200.00	30.00	230.00	200.00	6
furlong run	150.00	60.00	210.00	150.00	12
6 furlong run	175.00	45.00	220.00	175.00	9
4½ furlong run	150.00	35.00	185.00	150.00	7
1 mile run	200.00	25.00	225.00	200.00	5
5 furlong run	150.00	45.00	195.00	150.00	9
6 furlong run	175.00	50.00	225.00	175.00	10
5 furlong run	150.00	25.00	175.00	150.00	5
4½ furlong run	125.00	25.00	150.00	125.00	5
Total running races	$ 2,125.00	$ 450.00	$ 2,575.00	$ 2,125.00	90
Total harness races	9,400.00	5,544.00	15,196.40	9,652.40	91
Grand total all races	$11,525.00	$ 5,994.00	$17,771.40	$11,777.40	181

The following is the attendance of the 1922 fair, by days, compared with 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920 and 1921 fairs:

	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912
Wednesday	7,162	6,765	7,919	5,567	5,214	6,098	4,871	3,112	4,537	3.849	-------
Thursday	12,435	11,613	13,609	10,428	8,346	10,435	9,004	7,610	9,886	8,608	3,090
*Friday	47,369	44,088	50,249	40,004	29,713	38,079	30,671	27,722	27,613	33,020	7,503
†Saturday	69,701	32,434	38,233	37,507	24,573	29,771	29,853	17,158	27,999	26,861	27,957
Sunday	26,266	24,186	27,622	28,497	20,938	28,719	24,236	14,190	22,200	25,211	18,902
Monday	46,340	41,898	61,927	61,431	39,089	43,649	46,983	35,085	41,229	58,045	40,602
Tuesday	53,793	46,215	67,170	78,612	54,434	65,292	59,936	47,501	39,612	66,465	60,379
Wednesday	37,440	38,622	56,928	71,653	50,876	66,735	49,033	44,103	46,496	40,972	58.643
Thursday	37,694	30,065	33,521	46,613	67,072	38,351	24,270	31,955	31,523	17,431	38,831
Friday	23,061	18,137	26,658	27,835	24,122	22,169	13,115	16,630	21,978	-------	16,116
Total	361,261	294,023	383,836	408,147	324,377	349,298	291,972	245,066	273,073	280,462	272,023

*Children's day since 1913.
†Children's day, 1912.

ADMISSIONS TO GRAND STAND, AFTERNOON AND EVENINGS, 1922, COMPARED WITH 1918, 1919, 1920 and 1921.

	1922 Fair		1921 Fair		1920 Fair		1919 Fair		1918 Fair	
	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions
Friday	14,039	9,334	14,238	9,394	15,659	12,777	12,531	12,436	8,090	6,664
Saturday	24,020	11,840	6,441	7,430	7,361	8,575	6,773	12,431	7,265	7,065
Monday	9,424	11,675	9,474	12,266	14,333	19,119	15,398	24,719	11,107	15,101
Tuesday	9,744	9,604	9,785	9,485	14,191	17,110	15,871	24,395	12,938	17,897
Wednesday	4,993	7,161	7,019	9,413	11,856	13,050	14,797	21,037	12,442	16,173
Thursday	9,190	7,355	6,121	5,525	6,994	6,911	10,523	13,616	23,810	17,212
Friday	10,722	-------	7,098	2,012	13,696	*	15,024	-------	12,103	-------
Total	82,132	56,969	60,176	55,525	84,090	77,542	91,017	108,634	87,775	80,089

*Show called off on account of rain.

ADMISSIONS TO LIVE STOCK AND HORSE SHOW, IN STOCK PAVILION, 1922, COMPARED WITH 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920 and 1921.

	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912
Saturday	-------	1,369	1,765	1,543	899	758	942	484	806	1,042	-------
Monday	2,473	2,161	2,417	2,357	1,225	2,105	1,581	1,029	957	1,826	1,233
Tuesday	2,743	2,514	2,755	3,016	2,035	2,183	2,107	1,580	2,113	2,472	2,265
Wednesday	2,224	1,661	2,646	2,663	2,003	2,133	1,501	1,242	1,264	1,566	2,070
Thursday	1,379	1,115	1,552	1,662	-------	1,091	667	493	605	438	1,262
Total	8,819	8,820	11,135	11,241	6,162	8,270	6,798	4,228	5,745	7,344	6,830

The Following Table Gives the Number of Exhibitors and the Number of Entries Made in Each Department of the 1921 and 1922 Fairs.

Department	1922 Fair		1921 Fair	
	Number Exhibitors	Number Entries	Number Exhibitors	Number Entries
Horses	120	1,316	105	1,521
Cattle	152	2,299	118	1,779
Boys and girls' calves	328	433	167	192
Swine	270	3,933	279	3,211
Boys and girls' pigs	264	590	204	465
Sheep	37	1,419	33	898
Boys and girls' lambs	8	62	22	35
Goats	3	43	3	44
Poultry and pigeons	156	2,826	159	1,903
Boys and girls' poultry	101	564	203	855
Rabbits	6	64	12	130
Agriculture	245	1,977	332	2,116
Culinary	272	2,292	338	1,992
Dairy	106	116	124	131
Horticulture	78	1,422	104	1,334
Floriculture	8	140	43	479
Textile, china, etc.	228	1,985	237	1,873
Graphic and plastic arts	39	149	30	113
Radio	13	13	------------	------------
Boys and girls' club	405	988	587	751
Educational	66	881	109	765
Implements and machinery	271	------------	285	------------
Totals	3,176	23,512	3,494	20,587

The Following Tabulations Give the Number of Exhibitors and the Number of Horses, Ponies and Mules Entered and the Actual Number Shown at the 1921 and 1922 Fairs:

Breed	1922 Fair			1921 Fair		
	Number Exhibitors	Number Horses Entered	Number Horses Shown	Number Exhibitors	Number Horses Entered	Number Horses Shown
Percheron	29	164	147	21	124	102
Belgian	16	117	76	12	91	86
Shire	11	83	65	8	87	85
Clydesdale	5	39	31	14	72	30
Draft	13	70	25	16	29	23
Saddle and show horses	33	105	80	40	173	133
Ponies	13	145	131	10	84	84
Mules and jacks	9	98	33	7	64	34
Totals	129	821	588	105	724	577

The following tablulation gives the number of cattle exhibitors, the number of cattle entered and the actual number of cattle shown at the 1921 and 1922 fairs:

Breed	1922 Fair			1921 Fair		
	Number Exhibitors	Number Cattle Entered	Number Cattle Shown	Number Exhibitors	Number Cattle Entered	Number Cattle Shown
Shorthorn	42	333	261	40	331	273
Milking Shorthorn	8	27	27	3	41	40
Hereford	38	333	242	25	236	216
Aberdeen Angus	34	174	148	16	146	115
Polled Shorthorn	7	76	60	8	73	53
Red Polled	7	93	82	5	74	64
Galloway	2	29	30	1	12	12
Holstein	16	139	144	6	85	83
Jersey	8	90	87	7	110	101
Guernsey	17	73	49	4	25	22
Ayrshire	3	51	33	1	1	1
Brown Swiss	----------	----------	----------	2	40	38
Baby beeves	310	382	350	135	185	145
Pure bred heifers	18	23	23	32	54	47
Totals	505	1,823	1,536	285	1,413	1,210

The following tabulation gives the number of Swine exhibitors and the actual number of swine shown by breeds at the 1920, 1921 and 1922 fairs:

Breed	1922 Fair		1921 Fair		1920 Fair	
	Number Exhibitors	Number Swine Shown	Number Exhibitors	Number Swine Shown	Number Exhibitors	Number Swine Shown
Poland China	83	454	103	570	99	768
Duroc Jersey	88	510	89	553	121	1,150
Chester White	40	279	53	509	66	787
Hampshire	55	725	55	510	45	642
Spotted Poland China	38	317	20	107	16	172
Berkshire	2	13	9	48	4	90
Tamworth	25	292	6	62	6	70
Yorkshire	14	60	4	28	3	47
Boys and girls' pig club	264	487	204	460	167	310
Totals	609	3,137	543	2,847	527	4,036

The following table sets forth the amount of cash premiums

	1922	1921	1920	1919	1918	1917	1916
Horses	$ 19,265.00	$24,480.00	$ 24,653.00	$15,635.00	$13,555.00	$13,385.00	$14,412.00
Cattle	30,005.00	34,412.75	29,891.50	21,399.20	16,172.55	15,618.25	15,176.00
Swine	7,194.00	6,994.00	8,697.00	8,316.00	6,881.50	6,433.00	4,570.00
Sheep	3,912.00	4,587.00	4,084.00	4,121.00	3,402.00	4,039.00	3,757.00
Goats	245.00	248.00	96.00	219.00	77.00	----------	----------
Poultry	1,238.50	1,351.75	770.00	1,260.00	856.50	1,200.00	1,408.00
Pet stock	65.25	145.25	153.75	86.00	41.50	----------	----------
Agriculture	8,695.00	11,016.00	9,881.00	6,076.00	5,102.50	6,360.50	6,803.00
Culinary	1,325.00	1,342.00	1,231.50	1,280.00	1,190.50	1,149.50	1,198.50
Dairy	722.00	722.00	722.00	657.00	642.00	657.00	652.00
Horticulture	2,621.50	2,305.00	2,768.75	2,373.50	1,993.50	2,086.25	1,905.00
Floriculture	235.00	1,733.80	1,905.80	1,733.90	1,533.70	1,533.80	1,447.40
Textile, etc.	1,336.50	1,344.50	1,296.50	1,060.00	1,035.00	1,225.00	1,114.50
Art	589.00	604.00	538.00	626.00	648.00	648.00	662.00
Radio	60.00	----------	----------	----------	----------	----------	----------
Educational	741.50	815.00	551.00	1,401.00	1,563.00	1,442.00	1,288.00
Scholarships	625.00	----------	375.00	650.00	----------	----------	421.84
Speed premiums	17,771.40	21,506.59	19,747.67	18,144.71	17,555.88	16,544.77	12,145.17
Dog show	----------	----------	----------	----------	----------	----------	----------
*Baby health	----------	----------	----------	----------	----------	----------	----------
Spelling contest	160.00	200.00	100.00	100.00	100.00	100.00	100.00
Team judging	180.00	225.00	350.00	400.00	----------	----------	----------
Junior department	6,155.00	6,045.00	4,507.68	----------	----------	----------	----------
Horseshoe contest	1,380.00	350.00	300.00	----------	----------	----------	----------
Total premiums	$104,521.65	$120,427.60	$112,620.15	$85,538.31	$72,350.13	$72,442.07	$67,060.41

*Cups and medals given in place of cash prizes since 1912.

STATISTICAL STATEMENT COVERING RECEIPTS AND
1896 AND 1901 TO

Showing Receipts and Disbursements of Iowa State Fair and Other Improvements, Maintenance Grounds and Buildings, Etc.,

	Receipts						Disbursements	
	Cash Balance Beginning of Year	From State Fair	From State Appropriation	From Other Sources	Total Receipts for Year	Grand Total	Premiums Paid	Other Fair Expenses
1896	$ 116.79	$ 36,622.10	$ 7,000.00	$ 6,710.22	$ 50,332.32	$ 50,449.11	$ 16,404.29	$ 15,351.06
1901	28,616.55	50,712.91	1,000.00	2,753.82	54,466.73	83,083.28	19,203.83	13,925.87
1902	34,244.93	63,084.71	38,000.00	3,037.06	104,121.77	138,366.70	21,736.31	20,073.34
1903	30,372.25	59,838.56	1,000.00	3,140.79	63,979.35	94,351.60	23,813.13	21,989.56
1904	28,963.11	66,100.36	48,000.00	2,622.03	116,722.39	145,685.50	24,691.68	28,485.42
1905	29,657.23	84,786.25	1,000.00	2,840.92	88,627.17	118,284.49	28,730.89	34,408.62
1906	39,976.34	110,929.85	1,000.00	3,717.16	115,647.01	155,623.35	31,703.94	40,315.60
1907	50,294.87	104,356.75	76,000.00	5,452.34	185,908.09	236,103.96	35,504.79	43,647.20
1908	35,227.90	138,764.66	1,000.00	3,262.95	143,027.61	178,355.51	38,744.56	55,848.65
1909	25,328.73	137,307.40	101,000.00	5,257.42	243,564.82	268,893.55	42,262.76	66,963.12
1910	4,985.25	157,250.77	1,000.00	14,658.30	171,918.07	176,903.32	49,717.50	80,513.68
1911	7,283.44	179,549.67	78,000.00	5,275.72	262,825.39	270,108.83	56,264.35	81,603.16
1912	18,036.99	185,701.21	8,000.00	14,579.82	208,281.03	226,318.02	58,139.15	85,829.74
1913	615.63	188,832.10	30,786.81	17,211.86	236,830.77	237,446.40	61,069.90	85,670.12
1914	18,505.82	188,644.66	51,268.19	32,799.93	272,712.78	291,218.60	66,024.85	104,411.33
1915	968.73	165,604.40	36,666.73	51,949 80	264,220.93	265,189.66	69,598.75	101,561.38
1916	100.63	201,381.96	9,133.27	3,366.59	247,165.32	247,265.95	67,060.41	102,137.45
1917	3,998.17	257,122.56	24,832.25	17,341.11	299,295.92	303,294.09	72,442.07	117,091.31
1918	34,822.20	251,196.62	10,900.00	10,313.91	272,410.53	307,232.73	72,350.13	129,739.63
1919	50,486.38	321,574.55	58,741.18	14,075 95	394,391.68	444,878.06	85,538.31	163,542.19
1920	56,140.44	410,976.78	161,226.57	14,976.59	587,179.94	643,320.38	112,620.15	186,667.14
1921	73,354.64	297,695.25	32,192.94	16,475.83	346,374.02	419,728.66	120,427.64	173,696.43
1922	24,060.02	313,259.49	3,400.00	8,515.82	325,175.31	349,235.33	10,454.65	141,753.46

paid in all departments of the fair for a period of twelve years:

	1915	1914	1913	1912	1911	1910
Horses	$ 17,364.00	$ 18,537.50	$ 15,612.50	$ 14,940.00	$ 14,184.00	$ 10,381.00
Cattle	14,120.00	12,673.25	12,623.00	11,738.00	12,061.00	11,778.00
Swine	4,188.00	4,499.00	4,404.00	4,041.00	3,640.00	4,135.00
Sheep	3,375.00	2,779.00	2,317.00	2,306.00	2,388.00	2,146.00
Goats	----------	----------	----------	----------	----------	----------
Poultry	1,047.00	1,036.50	1,172.50	1,112.50	1,042.00	1,036.00
Pet Stock	----------	----------	----------	----------	----------	----------
Agriculture	6,672.00	5,398.00	4,173.00	4,059.00	3,524.00	3,074.00
Culinary	1,214.50	1,251.00	1,215.00	1,092.50	856.50	798.00
Dairy	652.00	652.00	602.00	627.00	627.00	602.00
Horticulture	1,759.75	1,680.00	1,614.00	1,139.25	1,115.75	892.00
Floriculture	1,575.00	1,535.60	1,439.40	1,382.40	1,278.60	945.00
Textile, etc.	1,150.00	1,183.00	1,658.50	1,662.50	1,744.50	1,753.00
Art	554.00	561.00	----------	----------	----------	----------
Radio	----------	----------	----------	----------	----------	----------
Educational	1,133.00	931.00	665.00	430.00	493.00	422.00
Scholarships	475.00	425.00	650.00	650.00	850.00	1,000.00
Speed premiums	14,319.50	13,203.00	12,620.00	12,360.00	12,310.00	10,755.00
Dog show	----------	----------	----------	318.00	----------	----------
*Baby health	----------	----------	----------	280.00	----------	----------
Spelling contest	----------	----------	----------	----------	----------	----------
Team judging	----------	----------	----------	----------	----------	----------
Total premiums	$ 69,598.75	$ 66,424.85	$ 61,069.90	$ 58,139.15	$ 56,114.35	$ 49,717.50

DISBURSEMENTS OF THE IOWA STATE FAIR FOR YEARS 1922 INCLUSIVE.

Sources and Expenditures, Together With Amount Expended for and Net Profit of Fair for Each of the Years Enumerated.

	Disbursements				Profits of Fair			
	Improvements and Perman't Repairs	Maintenance of Grounds and Buildings	Disbursements Other Than for Fair	Total for Year	Cash on Hand	Total Receipts of Fair	Total Expenses of Fair	Net Profits
1896	$ 7,471.95	----------	$ 14,019.88	$ 58,247.28	$ 152.84	$ 36,622.10	$ 31,807.35	$ 4,814.75
1901	13,378.73	----------	2,313.44	48,821.87	34,244.93	50,712.91	38,129.70	17,583.21
1902	63,457.12	----------	2,608.69	107,875.46	30,372.25	63,084.71	41,809.65	21,275.06
1903	17,855.77	----------	1,704.83	65,363.29	28,963.11	59,838.56	45,802.69	14,035.87
1904	59,641.11	----------	3,195.4	116,013 61	29 657.23	66,100.36	53,177.10	12,823.26
1905	11,963.09	----------	3,345.2	78,447.87	39,976.34	84,786.25	63,139.51	21,646.74
1906	30,035.33	----------	3,385.87	105,440.74	50,394.87	110,929.85	72,459.39	38,470.46
1907	16,459.05	----------	5,043.0	200,654.07	35,327.9	104,356.75	79,151.99	25,204.76
1908	53,663 69	----------	4,975.5	153,231.98	25,328.73	138,764.66	94,593.21	44,171.45
1909	150,208.58	----------	4,319.91	163,814. 7	4,985.25	137,307.40	109,225.88	28,081.52
1910	24,360.98	----------	14,740.2	169,332.42	7,283.44	157,259.77	130,231.18	27,028.59
1911	109,755.04	----------	4,429.28	252,071.84	18,036.99	179,549.67	137,867.51	41,682.16
1912	71,056.56	$ 6,575.51	4,101.43	225,702 39	615.63	185,701.21	143,968.89	41,732.32
1913	51,110.85	7,313.67	13,776.0	218,940.58	18.505.82	188,832.10	146,740.02	42.092.08
1914	100,649.13	7,564.86	11,599.70	290,249 89	968.73	188,644.66	172,113.92	16,530.74
1915	46,138.60	6,770.91	41,019.39	265,089.03	100.63	165,604.40	171,160.13	*5,555.73
1916	10,547.28	3,432.77	60,089.87	243,267.78	3,998.17	201,381.96	169,197.86	32,184.10
1917	38,773.77	8,284.47	31,880.27	268,471.89	34,822.20	257,122.56	189,533.38	67,589.18
1918	30,771.08	12,217.77	11,667.74	256.746.35	50,486.38	251,196.62	202,089.76	49,106 86
1919	105,216.08	21,617.51	12,823.53	388,737.62	56,140.44	321,574.55	249,080.50	72,494.05
1920	229,415.93	21,470.40	19,792.12	569,965.74	73,354.64	410,976.78	299,287.29	111,689.49
1921	54,909.74	20,037.01	26,609.51	395,680 53	24,060.02	297,695.25	294,124.27	3,570.98
1922	18,501.75	16,992.66	12,900.64	314,670.16	34,565.17	313,259.49	266,275.11	46,984.38

* Loss.

STATEMENT OF INSURANCE IN FORCE ON FAIR GROUNDS, BUILDINGS AND DATE OF EXPIRATION.

	Fire	Tornado	Premiums	Expiration
General form on frame buildings	$ 65,000.00	$ 65,000.00	$2,639.04	1925
Brick horse barn	14,500.00	14,500.00	395.12	1924
Brick horse barn		8,000.00	40.00	1925
Transformer station and contents	2,000.00	1,000.00	43.00	1925
Women and Children's Building	25,000.00	25,000.00	465.50	1923
Agricultural Building	10,000.00	10,000.00	275.00	1923
Administration Building	20,000.00	15,000.00	435.38	1923
Stock Pavilion	15,000.00	15,000.00	378.75	1923
Machinery Hall		15,000.00	75.00	1923
Swine Pavilion		13,000.00	65.00	1925
Grandstand		10,000.00	100.00	1923
Brick dining hall	4,000.00	2,000.00	100.00	1924
Street car station		2,000.00	10.00	1922
Sheep barn		13,000.00	65.00	1925
Cattle barn	50,000.00	50,000.00	1,612.00	1923
Superintendent's dwelling and barn	2,000.00	2,000.00	11.60	1923
Superintendent's dwelling	1,000.00	1,000.00	7.00	1927
Secretary's residence	5,000.00	5,000.00	60.00	1923
Secretary's residence	5,000.00	5,000.00	31.00	1927
Total insurance	$218,500.00	$261,500.00	$6,808.39	

REPORT OF TREASURER, F. E. SHELDON. MOUNT AYR, IOWA.

Mr. President and Gentlemen of the Convention:

In accordance with the wishes of the State Board of Agriculture, I herewith present a report of receipts and disbursements for the fiscal year ending November 30, 1922:

Balance on deposit December 1, 1921		$ 25,279.00
206,556 general admissions at 50c	$103,278.00	
702 round up at 50c	351.00	
20,149 admissions after 6 p. m at 25c	5,037.25	
29,486 half fare admissions at 25c	7,371.50	
78 taxicab tickets at $5.00	390.00	
1,917 exhibitors' tickets at $3.00	5,751.00	
17 solicitors' tickets at $4.00	68.00	
2,756 day grandstand (box) at $1.00	2,756.00	
15,718 day grandstand (reserved lower half) at 75c	11,788.50	
23,839 day grandstand (reserved upper half) at 50c	11,919.50	
904 day grandstand (quarter stretch) at 50c	452.00	
2,657 day grandstand (children, paddock) at 25c	664.25	
30,288 day grandstand (paddock) at 50c	15,144.00	
2,377 night grandstand (box) at $1.00	2,377.00	
13,663 night grandstand (reserved lower half) at 75c	10,247.25	
18,004 night grandstand (reserved upper half) at 50c	9,002.00	
2,024 night grandstand (children, paddock) at 25c	506.00	
18,712 night grandstand (paddock) at 50c	9,356.00	
688 night horse show (box) at $1.00	688.00	
5,924 night horse show (reserved) at 50c	2,962.00	
1,727 night horse show (standing room) at 25c	431.75	
Total ticket sales		$200,541.00
Received from Secretary and Superintendents as follows:		
Fees Stallion Registration Division	$ 3,877.00	
State appropriations	3,400.00	
Miscellaneous receipts other than fair	1,079.95	
Interest on account	527.89	
Superintendent of Grounds	3,030.98	
Superintendent Horse Department	3,008.00	
Superintendent Cattle Department	3,659.50	
Superintendent Swine Department	4,064.00	
Superintendent Sheep Department	493.00	
Superintendent Poultry Department	999.75	
Superintendent Machinery Department	12,743.95	
Superintendent Agricultural Department	2,120.00	
Superintendent Dairy Department	2,798.73	
Superintendent Exposition Department	3,047.50	
Superintendent Concession Department	45,649.59	
Superintendent Light and Power	1,226.90	
Superintendent Speed Department	6,128.00	
Superintendent Forage Department	10,285.28	
Association Special Premiums	13,622.01	
Secretary, advertising in premium list	1,492.58	
Secretary, miscellaneous receipts of fair	1,379.70	
Total receipts other than ticket sales		$124,634.31
Grand total receipts		$350,454.31

DISBURSEMENTS.

Expense warrants paid	$210,325.06	
Premium warrants paid	104,604.58	
Total disbursements	$314,929.64	
Balance on hand November 30, 1922	35,524.67	
To balance		$350,454.31

December 1, 1922.

To the Directors of the State Board of Agriculture:

Gentlemen: This is to certify that there was on deposit at the Central State Bank November 30, 1922, a time deposit of $10,000, and a balance to the credit of F. E. Sheldon, Treasurer of the Iowa Department of Agriculture, the sum of $25,524.67, making a total credit of $35,524.67.

Yours very truly,
FRANK C. ASH, Assistant Cashier.

INVENTORY OF REAL ESTATE AND FAIR GROUND BUILDINGS

	Value Nov, 30, 1921	Depreciation 1922	Added Imp. 1922	Value Nov. 30, 1922
Real estate	$ 459,076.19	----------	----------	$ 459,076.19
Real estate, carrying account	156,111.94	----------	$ 1,495.93	157,607.87
Carbon lamps	2,834.00	$ 944.67	1,117.92	3,007.25
Telephone exchange	1,912.32	95.62	----------	1,816.70
Light system	26,505.78	1,047.14	7,226.10	32,684.74
Administration Building furnishings	3,382.06	169.10	460.59	3,673.55
Amphitheatre chairs	2,708.96	135.45	----------	2,573.51
W. & C. Building furnishings	3,198.27	159.91	----------	3,038.36
Building fixtures, general	1,778.99	88.95	----------	1,690.04
Office furniture, general	1,084.30	54.22	135.23	1,165.31
Tools and equipment	19,435.37	1,021.77	1,785.95	20,199.55
Live stock (mule team)	360.00	36.00	----------	324.00
Supplies	4,427.93	221.40	----------	4,206.53
Agricultural Building fixture	2,459.98	73.80	5.00	2,391.18
Wells and pump	86.25	4.31	17.56	99.50
Scales	87.29	4.36	----------	82.93
Administration Building	35,164.41	527.46	66.23	34,703.18
Administration cottage	216.05	10.80	----------	205.25
Agricultural, Horticultural and Dairy Buildings	45,724.88	685.87	350.65	45,389.66
Ampitheatre	93,051.48	930.51	1,814.53	93,935.50
Art Hall	398.50	19.93	----------	378.57
Auto garage	37.26	1.86	9.35	44.75
Blacksmith shop, speed B.	244.53	12.23	10.50	242.80
Boys and Girls' Club Building	2,955.41	88.66	7.00	2,873.75
Bleachers	8,243.40	494.60	229.65	7,978.45
Band stand	205.51	10.27	81.25	276.49
Barber shop (sold 1919)	----------	----------	----------	----------
Boys' dormitory	5,402.87	162.08	17.00	5,257.79
Cattle barn (new)	216,965.24	3,254.48	4,454.35	218,165.11
College Building	5,747.72	172.43	17.25	5,592.54
Closet No. 1	258.92	10.36	----------	248.56
Closet No. 6	132.46	6.62	----------	125.84
Closet No. 14	211.34	10.57	----------	200.77
Closet No. 16 (burned down)	----------	----------	----------	----------
Closet No. 17	276.63	13.83	----------	262.80
Closet No. 18	2,494.95	99.80	----------	2,395.15
Closet No. 19	2,420.80	96.83	----------	2,323.97
Closet No. 20	172.80	8.64	5.74	169.90
Closet No. 21	53.67	5.36	5.74	54.05
Closet No. 22	79.14	3.95	5.74	80.93
Closet No. 23	2,391.43	95.65	5.74	2,301.52
Closet No. 24	242.33	12.12	5.74	235.95
Closet No. 25	197.39	9.87	5.74	193.26
Closet No. 26	168.67	8.43	5.74	165.98
Closet No. 27	172.74	8.64	5.74	169.84
Closet No. 28	172.74	8.64	5.74	169.84
Closet No. 29	297.48	11.90	5.74	291.32
Closet No. 30	65.71	6.57	5.74	64.88
Closet No. 31	24.93	2.49	5.73	28.17
Closet No. 32	64.40	6.44	5.73	63.69
Closet No. 33	586.07	23.44	----------	562.63
Chicken coop (secretary's)	242.50	7.28	1.00	236.22
Dining hall (old P. O.)	713.00	28.52	----------	684.48
Dining hall (brick)	8,620.85	172.42	8.10	8,456.53
Dining hall (Grand Ave.)	5,511.99	165.36	----------	5,346.63
Exposition Building	22,274.66	890.99	6.25	21,389.92
Farm house	4,009.03	160.36	----------	3,848.67
Farm barn	1,200.05	48.00	----------	1,152.05
Floral Hall (B. & G. dining hall)	1,403.80	140.38	286.42	1,549.84
Forage barn	1,658.56	66.34	78.00	1,670.22
Fire station	623.49	18.70	----------	604.79
Flag poles	437.42	4.37	----------	433.05
Filing station	110.09	3.30	1.25	108.04
Game farm cottage	624.79	24.99	----------	599.80
Grocery store	401.63	20.08	----------	381.55
Grand Avenue entrance	4,375.22	65.62	12.25	4,321.85
Garage, secretary's	285.00	14.25	----------	270.75
Horse barn, brick	48,788.97	731.83	80.50	48,137.64
Horse barn No. 1	1,788.64	53.66	87.00	1,821.98
Horse barn No. 2	1,197.34	35.92	488.23	1,649.65
Horse barn No. 3	1,596.42	47.89	----------	1,548.53
Horse barn No. 4	1,436.92	43.11	----------	1,393.81
Horse barn No. 5	1,437.36	43.12	----------	1,394.24
Horse barn No. 6	1,439.74	43.19	----------	1,396.55
Horse barn No. 7	1,093.99	32.82	115.10	1,176.27
Hospital	697.64	20.93	20.56	697.27

	Value Nov, 30, 1921	Depreciation 1922	Added Imp. 1922	Value Nov. 30, 1922
Ice house (old)	269.84	13.49	------------	256.35
Ice house (new)	239.74	9.59	------------	230.15
Judges' stand	248.34	2.48	------------	245.86
Judges' stand (show ring)	9.57	.95	------------	8.62
Lumber shed	669.81	33.49	102.26	738.58
Lumber shed	845.27	25.36	102.26	922.17
Lumber shed	845.39	25.36	102.26	922.29
Machinery Hall	78,096.12	1,171.44	404.04	77,328.72
Meat market	150.72	15.07	------------	135.65
Nurse cow barn No. 1	640.39	19.21	2.00	623.18
Nurse cow barn No. 2	640.39	19.21	2.00	623.18
Nurse cow barn No. 3	640.30	19.21	2.00	623.09
Nurse cow barn No. 4	640.30	19.21	2.00	623.09
Nurse cow barn No. 5	640.30	19.21	2.00	623.09
Nurse cow barn No. 6	640.30	19.21	2.00	623.09
Office building No. 2 (never speed barn)	283.82	11.35	------------	272.47
Office building No. 3	132.68	6.63	------------	126.05
Office building No. 6	176.37	8.82	------------	167.55
Office building No. 7	226.61	11.33	------------	215.28
Office building No. 8	262.23	13.11	------------	249.12
Office building No. 9	89.83	4.49	------------	85.34
Office building No. 10	256.54	12.83	------------	243.71
Office building No. 11	123.01	6.15	------------	116.86
Office building No. 12	171.31	8.57	------------	162.74
Office building No. 13	273.87	10.95	------------	262.92
Office building No. 15	26.53	1.33	------------	25.20
Office building No. 16	115.16	5.76	------------	109.40
Poultry Building	8,234.62	329.38	8.97	7,914.21
Power Hall	5,264.78	210.59	6.25	5,060.44
Police headquarters	336.46	15.82	------------	319.64
Paddock, cooling out	8,423.50	168.47	5.75	8,260.78
Postoffice (new)	460.56	18.42	------------	442.14
Rabbit Building	473.75	14.21	------------	459.54
Rock Island entrance	230.49	11.52	------------	218.97
Refreshment stand	49.76	2.49	------------	47.27
Speed barn A	1,351.34	40.54	4.12	1,314.92
Speed barn No. 1	1,192.61	35.78	4.12	1,160.95
Speed barn No. 2	1,000.39	30.01	4.12	974.50
Speed barn No. 3	1,000.39	30.01	4.12	974.50
Speed barn No. 4	1,000.39	30.01	4.12	974.50
Speed barn No. 5	1,000.39	30.01	4.12	974.50
Speed barn No. 6	1,000.39	30.01	4.12	974.50
Speed barn No. 7	1,020.39	30.61	4.12	993.90
Speed barn No. 8	834.73	25.04	4.12	813.81
Speed barn No. 9	834.73	25.04	4.12	813.81
Speed barn No. 10	834.72	25.04	4.12	813.80
Speed barn No. 11	541.37	21.65	4.12	523.84
Speed barn No. 12	505.56	20.22	4.12	489.46
Swine pavilion	72,477.78	1,087.17	297.50	71,688.11
Stock pavilion	35,800.83	537.01	111.21	35,375.03
Street car station	7,809.82	78.10	------------	7,731.72
Sheep barn	24,095.67	481.91	14.41	23,628.17
Shaver Building	2,674.43	53.49	40.84	2,661.78
Secretary's residence	14,770.53	737.52	------------	14,033.01
Telephone station	590.98	17.73	60.98	624.23
Ticket booth No. 1	22.21	1.11	------------	21.10
Ticket booth No. 2	22.21	1.11	------------	21.10
Ticket booth No. 4 and 5	79.69	3.98	------------	75.71
Ticket booth No. 6 and 7	68.34	3.42	------------	64.92
Ticket booth No. 8 and 9	68.34	3.42	------------	64.92
Ticket booth (Grand Avenue)	17.60	.88	------------	16.72
Ticket booth (quarter stretch)	7.94	.40	------------	7.54
Ticket booth (amphitheatre)	38.24	1.53	------------	36.71
Ticket booth (amphitheatre)	44.56	1.78	------------	42.78
Ticket booth (amphitheatre)	42.64	1.71	------------	40.93
Ticket booth (amphitheatre)	57.04	2.28	------------	54.76
Ticket booth (reserved seats)	31.77	1.27	------------	30.50
Ticket booth (stock pavilion)	26.25	1.05	------------	25.20
Ticket booth (Rock Island)	55.11	2.20	------------	52.91
Ticket booth (Rock Island)	19.04	.76	------------	18.28
Ticket booth (paddock)	20.86	1.04	------------	19.82
University Avenue entrance	686.81	10.30	10.25	686.76
Vaudeville stages	1,666.36	66.65	------------	1,599.71
Women and Children's Building	74,058.92	1,110.88	156.10	73,104.14
Walnut Street entrance	1,580.61	223.71	75.12	1,632.02
W. C. T. U. Building	71.25	3.56	------------	67.69
Grand total	$1,582,112.48	$ 20,657.11	$ 22,125.06	$ 1,583,580.43

IOWA STATE FAIR BALANCE SHEET

November 30, 1922

RESOURCES

Real estate	$612,654.58	
Buildings	893,972.70	
Light and telephone plant	34,501.44	
Personal property	42,451.71	
		$1,583,580.43
Accounts receivable		1,227.12
Cash balance in treasury November 30, 1922		34,565.71
Total resources		$1,619,372.72

LIABILITIES

Accounts payable		$ 774.09

SURPLUS

State appropriation for frame buildings, 1885	$ 50,000.00	
State appropriation for real estate	89,124.47	
State appropriation for permanent buildings since 1902	596,000.00	
Increase in value of real estate and profits of fair invested in permanent improvements	883,473.96	
Total surplus		$1,618,598.63
		$1,619,372.72

President Cameron: You will find the treasurer's report, gentlemen, printed in this report, so it will not be necessary for the treasurer to make his report.

President Cameron: We have with us this morning, Mr. Chas. D. Reed, Director of the Iowa Weather and Crops Service Bureau. I take pleasure in introducing Mr. Reed to the convention at this time who will give us a review of the work carried on by this Bureau.

Mr. Reed: The winter preceding the crop season of 1922 was warmer and slightly more moist than normal with snowfall of only 9.5 inches for the three winter months, which is the least of record and 2.5 inches less than the winter of 1906-1907, which has heretofore held the record. The storm of January 4th-5th left a coating of ice over the southern and part of the central counties that remained for several days. Another ice or "glaze" storm February 21st-23rd damaged fruit and shade trees. It was feared that these two storms would kill considerable winter wheat and tame grass but for some reason only two per cent of the winter wheat was killed, which is far less than the average.

Considerable precipitation in February and toward the last of March made the soil too wet to work until well into April. Scarcely a beginning had been made in spring seeding during the first 10 days of April, but drying weather the rest of the month permitted rapid progress in seeding and toward the close of the month there was some complaint in the drier western counties that soil moisture was not sufficient to germinate oats. Not much spring wheat was sown.

The rather unusual warmth and moisture advanced vegetation rapidly but did not swell the fruit buds to the danger point, and no frost damage to fruit occurred.

Live stock in general wintered well. Sows bred for spring pigs increased 29 per cent over the preceding spring, but the superabundance of cheap corn and the scarcity of ready cash to buy supplemental feeds, caused the sows to be fed an unsuitable ration. Cholera, "flu" and other diseases weakened the sows so that the size, vitality and uniformity of litter were considerably reduced, and the unfavorable weather of April caused considerable loss of pigs. Though May did not warm up as rapidly as usual, it was dry and sunshiny and with the coming of tender shoots of grass, the condition of sows and pigs improved rapidly.

Preparations for corn planting proceeded without interference, except in a few central and eastern counties where heavy local rains occurred May 23rd-26th. Sixty per cent of the acreage was planted by May 15th, and 96 per cent by June 1st.

Drouth continued in June, the average rainfall for the month, 1.82 inches, being as little as June, 1911, when one of the more notable drouths of the state set in. Temperatures were very high, the warmest day of the year in the northwest portion of the state being June 23rd, when temperatures of 100° or higher occurred. Inwood reported 104°. Corn was not materially injured though the leaves curled some on hot afternoons. By the close of the month the earliest corn was more than waist high and about half of the crop was laid by. Oats headed very short—too short to harvest in some localities in the west central and northwest counties, yet thrashing returns showed yields slightly above the 10-year average over most of the State and the quality was much better than last year. Winter wheat, spring wheat and barley were not injured as much as expected, the yield and quality being generally satisfactory.

In contrast with June, July was cool and wet, which went far to repair the crop damage. In only a few northern counties did the temperature get as high as 90°. Beginning with a general rainstorm July 5th-7th, frequent copious rains broke the drouth. Much damaging hail attended the rain, yet the benefits of the storms far oueweighed the damage. Some of the storms had tornadic characteristics in small areas. Small grains, standing and in shock, were damaged by the wind and rain. Yet harvest progressed well. Much fruit was blown from the trees, but an abundance remained for full development.

August was the warmest month of the year, the greatest temperature excess occurring about the 15th-24th, followed by an abrupt change to 50° colder at a number of stations. Excessive rainfall in some southwest counties was centered in Shelby county where 9.46 inches fell at Harlan, but for the State as a whole precipitation was deficient. Shocked grain was damaged in the wet area, while corn, pastures and truck crops were injured by drouth in some eastern counties. Much of the State was visited by severe hailstorms and there was considerable damage from wind squalls.

September was warm and considerably drier than the average, the warmest period being the first eight days, during which over much of the State the highest temperatures of the year occurred. Many northern and eastern stations had the highest September temperatures of record—at one station the highest in 50 years. Slight frosts occurred on the 10th, 11th, 16th, 25th, 26th and 27th, but no damage resulted. Silo filling and fodder cutting made good progress. The corn stood up much better than last year, and there was much less damage from corn ear worm. Commercial sweet corn and tomato canning proceeded under favorable conditions, the quality of the pack being very good and the quantity considerably larger than last year. Deficient rainfall impeded plowing and preparation for winter wheat seeding, and together with the heat wave, is thought to have shortened the corn yield slightly, but this was off-set by hastening the maturity of the corn. Winter wheat seeding was delayed to avoid the Hessian fly, which was unusually numerous till near the close of the month.

The first six and last eight days of October were unusually warm. Killing frosts occurred on the 9th over a large area in the northwest portion, and on the 12th over most of the State, except a few Mississippi River counties which did not experience a killing frost till the 18th. About 97 per cent of the corn matured without frost damage. The crop dried rapidly and much was cribbed toward the close of the month. Winter wheat seeding progressed rapidly at the beginning of the month and 85 per cent was finished by October 10th. Moisture was generally sufficient for germination of the wheat which made good growth until near the close of November. Considerable damage to early seeded wheat by Hessian fly was reported.

An uuusual windstorm November 5th blew much corn to the ground over the western two-thirds of the State. Current and subsequent rains damaged the down corn, which lay in the muddy fields at temperatures high enough to cause rotting and sprouting. Husking was considerably delayed by the wet fields through which full loads of corn could not be drawn. Another windstorm Thanksgiving Day, November 30th, the most severe in many years, caused further damage to the remnant of corn remaining in the fields.

Iowa's 1922 corn crop is the second largest of record. The old corn on Iowa farms November 1st was estimated at 39,668,000 bushels; new corn, December 1st, 455.535,000 bushels; total corn 495,203,000 bushels; compared with a total of 502,344,000 bushels in 1921, and 506,943,000 bushels in 1920. New corn is 28 per cent above pre-war normal; old corn 159; and total corn 33 per cent above pre-war normal. Fortunately, Iowa farmers are much better provided with live stock to consume this corn than they were last year and the corn production of the country as a whole is less.

It is unusual that both warm weather and cool weather crops produce well in the same season, but in 1922, practically all crops yielded above the 10-year average and fruit, particularly apples, made an unusually large crop. The total value of crops is 57 per cent greater than a year ago.

FINAL ESTIMATES OF IOWA CROPS, 1922.

An increase of 57 per cent in the total value of Iowa's 1922 crops over 1921 is shown by the final joint estimates of the Iowa Weather and Crop Service and the U. S. Bureau of Agricultural Economics read by Charles D. Reed, Director of the State service, at the State Agricultural Convention in the House Chamber of the Capitol Building Wednesday.

Four bumper corn crops in succession is Iowa's unprecedented record; the 1922 crop of 455,535,000 bushels being raised on 10,123,000 acres with an average yield of 45 bushels to the acre, worth December 1, 54 cents per bushel or a total value of $245,989,000. The total corn crop of 1922 is exceeded only by that of 1920. The quality is good, the moisture content of that received at elevators during the last week in November being 16.8 per cent as compared with 16 per cent last year. Ninety-seven per cent matured without frost damage. On December 1, 86 per cent of the corn husking had been done, which is about the usual. About 8 per cent of the total crop was hogged and grazed down.

Oats were a much better crop than last year, yielding a total of 222,851,000 bushels on 6,023,000 acres with average yield of 37 bushels per acre, worth 34 cents per bushel or a total value of $75,769,000.

Spring wheat acreage dropped to 68,000 which is probably the least since Iowa became a State. The yield per acre was 15 bushels; the total crop, 1,020,000 bushels, worth at 95 cents per bushel, $969,000.

Winter wheat is steadily gaining favor in Iowa. The acreage in 1922 increased to 689,000; the yield per acre was 23 bushels; the total yield, 15,847,000 bushels; the price 97 cents per bushel and the total value, $15,372,000. Winter killing was only 2 per cent in the winter of 1921-22. A further increase in acreage seeded is reported for the 1923 crop but there are indications that this will be somewhat reduced by the depredations of the Hessian fly.

Barley acreage is estimated at 150,000; yield per acre, 28.4 bushels; total, 4,260,000 bushels, worth, at 52 cents per bushel, $2,215,000.

Rye acreage was 60,000; yield per acre, 19 bushels; total yield 1,140,000 bushels; price 71 cents per bushel; value, $809,000.

Flaxseed: Area harvested 8,000 acres; average yield, 10 bushels; total yield, 80,000 bushels; price per bushel, $2.07; total value, $166,000.

Timothy seed: Area harvested, 230,000 acres; average yield, 4.53 bushels; total yield, 1,042,000 bushels; average price, $2.49; total value, $2,595,000.

Clover seed: Area harvested, 132,000 acres; yield per acre, 1.7 bushels; total yield, 224,000 bushels; price per bushel, $10.40; total value, $2,330,000.

Tame Hay increased to 3,393,000 acres, including 200,000 acres of alfalfa. The average yield was 1.40 tons; total production, 4,750,000 tons; price $10.40 per ton; total value, $49,400,000.

Alfalfa yielded 2.67 tons per acre or a total of 534,000 tons; price, $14.80 per ton; total value, $7,903,000.

Wild Hay: Area, 432,000 acres; yield per acre, 1.14 tons; total production, 492,000 tons; price, $8.50 per ton; total value, $4,182,000.

Minor miscellaneous crops such as garden truck, fruit, popcorn, sweet corn, buckwheat, sugar beets, pasturage, etc., are lumped off at a paltry $75,101,000 worth.

Increased values due to feeding a considerable portion of these crops to live stock are not considered in this report.

TABULATED CROP SUMMARY, 1922.
IOWA.

Crop	Acres	Average yield	Total yield	Average price	Gross value per acre	Total value
Corn	10,123,000	45.0 bus.	455,535,000	$ 0.54	$24.30	$245,989,000
Oats	6,023,000	37.0 "	222,851,000	0.34	12.58	75,769,000
Spring wheat	68,000	15.0 "	1,020,000	0.95	14.25	969,000
Winter wheat	689,000	23.0 "	15,847,000	0.97	22.31	15,372,000
Barley	150,000	28.4 "	4,260,000	0.52	14.77	2,215,000
Rye	60,000	19.0 "	1,140,000	0.71	13.49	809,000
Flax seed	8.000	10.0 "	80,000	2.07	20.70	166,000
Timothy seed	230,000	4.53 "	1,042,000	2.49	11.28	2,595,000
Clover seed	132,000	1.7 "	224,000	10.40	17.65	2,330,000
Potatoes	94,000	90.0 "	8,460,000	0.62	55.80	5,245,000
Hay (Tame)	3,393,000	1.40 tons	4,750,000	10.40	14.56	49,400,000
Hay (Wild)	432,000	1.14 "	492,000	8.50	9.68	4,182,000
Alfalfa	200,000	2.67 "	534,000	14.80	39.52	† 7,903,000
Pasture and grazing	10,130,000			5.58		56,525,000
Ensilage	304,000	8.0 "	2,432,000	3.40	27.20	* 8,269,000
Sweet corn (commercial crop)	30,000	3.0 "	90,000	7.00	21.00	630,000
Pop corn	5,500	2,200 lbs.	12,100,000	0.03	66.00	363,000
Buckwheat (estimated)	5,000	14.0 bus.	70,000	1.19	16.68	83,000
Fruit Crop (estimated)						10,000,000
Garden truck (estimated)						5,000,000
Miscellaneous (estimated)						2,500,000
Total value, not including live stock products, for the year, 1922						480,142,000
1921						305,459,429
1920						560,460,638

† Alfalfa included in tame hay and therefore excluded from grand total.
* Ensilage, acreage, production, and value is included in corn and therefore excluded from grand total.

Charles F. Searle, Agricultural statistician,
U. S. Bureau of Agricultural Economics.

Charles D. Reed, Director,
Iowa Weather and Crop Service.

President Cameron: The next subject on the program is something in which we are interested: Boys and Girls Club Work. We have with us the State Leader, Professor P. C. Taff of Ames, who is very much interested in Boys and Girls club work, and who has had a great deal to do in making it a success in the state of Iowa. I take pleasure in introducing Professor Taff at this time.

Prof. P. C. Taff: Mr. Chairman and Gentlemen of the convention: I am especially glad to have the opportunity to talk with you a few minutes this morning about this important question. I don't know where we could get a group of men together who would be more interested and more influential in developing this type of work than the people we have here this morning, so I am especially glad to meet you on that account.

I believe this is the most important work we have to do in order to meet our agricultural problems of the future. I believe we have the greatest opportunity to really develop agriculture by working with the boys and girls. You people know this to be a fact and you are trying, through your fair work and other institute work, to introduce the best known agricultural practice. You know if you take an agricultural practice and place it in the hands of a person forty or fifty years old that that practice is not going to be used by that person very long, probably ten or not to exceed fifteen years in the ordinary expectancy of life. But you can take that same practice and you can put it in the hands of a young person, a boy or girl fifteen to twenty years of age, just coming into the use of that information and that information will be used by that person anywhere from forty to fifty years. And so I say from the standpoint of economy, the expenditure of funds, you are going to do more with your money and with your efforts in working with the boys and the girls than you are with the older people. That is to say nothing of the well-known fact among educators that a boy or girl can be taught more than an older person. We have our habits established. We think we know certain things from experience, and men who are on the farms do know a lot of things from experience, and they don't take so readily to new ideas as do the boys and the girls. And so I say from that standpoint, too, it is well worthwhile to expend your efforts as much as you can upon the boys and the girls.

This boys' and girls' club work that you all assist in considerably, it seems to me, fits especially well into the plan of your fair work. In the first place, one of the principal things that we try to hold up to these boys and girls is that they ought to learn from it some better methods than anyone used before. That is the educational side of the work and one of the most important. I believe that is one thing that fairs are trying to do. They are trying to push along, in other words, to give the individual something a little better than he had before. We try to do that in boys' and girls' club work. And we believe we accomplish a great deal along that line, because when a boy or girl goes into the work he or she receives some information and begins to use it in the home or on the farm.

Then in the second place one of the big features of this work is the demonstration phase of it. We don't ask them simply to get that information for themselves and keep it, but we impress upon them the importance and the opportunity that they have for spreading that information to others. It may be that it is used only in the home work or on a particular farm, but more likely it will be outside of that, and in that community is ever teaching some of these better practices.

I related this incident yesterday to show you what the effect of the boys' and girls' work has sometimes in a community in that regard: A boy up in a northwest Iowa county wrote in last summer and complained of the fact that he was being bothered by the people in the community—that is the way he put it—by the people in his community all coming and wanting to see his calf. He had an especially good type of calf he was feeding. The people began to hear about it in that community and they would come and ask him to lead it out of the barn, and he said it got to the point on Sundays so he would just simply lead the calf out under a tree and tie it there so he would not have to be leading it in and out of the barn all the time.

That is a good demonstration of the fact that the people in that community were looking to that boy and his calf for something better than probably they had upon their own farms. They believed that calf was an especially good type and they were coming there to see what that animal looked like and undoubtedly they carried away information that they are going to use later on. Further than that, I venture to say that hardly a person came there to look at that boy's calf but asked one further question, that is, they asked the boy "What are you feeding that calf?" And if that boy was following out, as he undoubtedly was, some of the best feeding instructions given anywhere, he would tell them of the ration, which was probably better than anything they had ever heard of or were using on their own farms. There again they were carrying away this idea.

We use this illustration sometimes in connection with girls' work more particularly: You know a few years ago throughout the farming communities of the north and also of the south, what is known as cold-pack canning was almost an unknown thing. The canning factories used it very commonly, but the homes never used it, didn't know certain products could be canned by this process. Then in 1915 the girls' club began demonstrations all over the country, in this state and in other states, and they followed that up with public demonstrations at fairs and all kinds of meetings, until as you probably know today the cold-pack canning method is very commonly used; in fact, a survey recently made by the department of agriculture revealed this, that the cold-pack canning method is now used in more homes in the United States than do home bread baking. That may be a surprising statement, but we get the figures from all over the country and it shows the results of the work. It shows that through this work you can put into effect in any county, any community any good agricultural practice in the way of live stock raising, corn raising, poultry raising, or something for the home. It is entirely possible to do that with the boys and girls, to teach them these things, and in a few years it will be common practice in that community. Those are two things I had in mind that fit especially well into your work.

Then there is another thing I am sure every one of you present here is interested in and that is the fact that by working with these boys and girls in work of this kind and bringing them out to work together and compete together, we are developing in these rural boys and girls leadership that is going to be important in the very near future.

I was in a meeting last spring when these presidents of a certain kind of boys' club were called in, there happened to be thirty-one groups in that county, and the president of a small college got them together and gave them some instructions in regard to how to handle a meeting, how to preside, because that was what they were going to do when they went back and held their own club meetings. He gave them instructions on simple things about parliamentary law. I heard a father say after that meeting: "Well, it would have been just a whole lot better for us if we could have had that very same thing when we were younger." I think that expressed very well the idea of a good many people in regard to this work.

In connection with this work, some have asked, "Why can't the schools do this?" Well, the schools are doing a lot and we certainly want to assist and cooperate with the schools in every way we can, but I have to point out in that connection these figures, which may somewhat astound you. There is an old saying you know that figures don't lie, but liars do figure, so if you don't believe me figure it out yourself. It is a fact that a boy or girl in the average community, farm community in Iowa, from the time they are born until they are twenty-one years of age, if they are good boys and girls, spend about one per cent of their time in church and about 10 per cent of their time in school, which leaves about 90 per cent of their time under home direction. That is why I believe these clubs I am talking about, and which you can assist in, are important because they teach the boy or girl so effectively, with so much of their time.

I believe we have an opportunity to help the boys and girls on the farm in helping them develop themselves for agricultural leaders. You know it is a fact in the average county in Iowa about 160 new farmers start every year; about 160 boys start farming every year. That is to say nothing of the girls who go into the farm houses. If we just simply expend our efforts to reach that 160 and see that they are equipped with the best possible information concerning all farm operations, I believe in a few years we will have a class of farmers upon our farms that would produce more efficiently than is the case at the present time.

I want to speak just briefly of the things that exhibitions and contests, and more particularly what the Iowa State Fair is doing for the boys' and girls' club work. We who are in state work use the Iowa State Fair particularly in our state work—and you can use it as sort of a goal, as a thing we urge the boys and girls to strive for. We have a wonderful help in that way. In all this work, the contest feature, the competition is always in the boy's or girl's mind. You know a football game would not be interesting at all if it were not for the contest.

We find the contest feature especially helpful, and so we point a good deal of our state effort towards the state fair, which brings together practically everything in the work in which the boys and girls are competing. We are certainly very glad that we have a state fair board here which is backing the boys' and girls' work so strongly. We certainly appreciate the work they are doing and we only hope it will not develop so fast that they cannot keep up with it. Or to put it another way, we hope they will be able to keep up with the growth in it because we know there is a tremendous growth right now in this work. I say we point our efforts toward the state fair, and you have seen the results if you have been up here and observed the exhibits at the fair.

We divide these things into about three classes: for exhibits, for demonstrations and for judging contests; and in addition to that, of course, we have the camp and dining hall. But exhibits are the feature, exhibits attract more attention than anything else because they have been growing and developing and are most evident, and in the last few years there has been a wonderful growth in that work. For instance, this past year we had enrolled in the state a few less than 700 boys in the calf club and baby beef feeding work. There were on exhibition at the Iowa State Fair last year 382 head, practically one-half of the total number fed. Just as warning to the state fair board I want to say that as near as we can figure at the present time—the figures are incomplete, because the enrollment for this coming year is not all finished—we know that there are 1,200 head on feed at the present time, and I would not be at all surprised with the rate they are coming in if, within the next month, there will be at least 1,400 or possibly 1,500. If the same percentage holds in regard to the number exhibited you can expect 750 or 800 calves at the Iowa State Fair next year. That is going to present a problem to our fair board. I believe it is something of importance for the reason that you men as fair people know it is not a good thing to try to discourage a part of those exhibits from coming. I think probably all of you have had experience in trying to throw out a little smoke screen saying: "We are going to have a tremendous exhibit, going to be crowded and probably some ought to stay at home." The consequence of a recommendation of that kind is that entirely too large a percentage stay home.

I don't believe in this case that you ought to try to limit the numbers, at least very much, because exhibiting at the state fair offers these boys that grow these calves an opportunity to market these animals to an advantage they cannot get in their local communities very often, so urge them to come here if at all possible, and we hope there will be large numbers come and we hope they won't overcrowd the accommodations of the fair. But I do believe you will have that problem to meet next year, even much greater than last year.

That calf club class is one of the interesting and one of the important things. I think we are safe in saying that last year we had as many calves in the baby beef class at the Iowa State Fair as were on exhibit at any show in this country this year and possibly a few more. The pig club classes at the Iowa State Fair are very large also, this year something over 600 head. Most of these pigs are brought in and returned home.

The reason they come in large numbers is they are easy to convey to the fair and easy to take back. A great many of them are trucked in. I believe that class will continue to be large and probably grow. The membership in clubs is going to be much larger next year than it has ever been before. The pig club class is going to present another problem in accommodation at the state fair. We do hope this matter of the pig club classes will be looked into early this year and something worked out that will accommodate them in good shape. I think this applies to your own local accommodations as well as to the Iowa State Fair.

Of all things we don't want to do is to give these boys and girls the wrong impression of exhibitions. If they have to come to make their exhibits and meet with poor accommodations it won't be very long until they become discouraged in the matter of exhibiting. I think it is very important that our boys and girls get the most satisfactory accommodations possible to show their stuff, at least equal with the older people.

In the matter of demonstrations we are meeting another problem. You are always interested at your fairs in having something that will attract and will impress people with its value, yet having these demonstrations put on by these boys and girls accomplished that purpose last year. In Chicago I was very much interested in the team from Iowa which demonstrated there. It was the baby beef club team from Muscatine county which won out here at the Iowa State Fair last year and we were able to get the two best in Chicago. They gave a demonstration there during the International on Monday last week, and a number of men of the stock yards were there, including Mr. Leonard, who commented very favorably on the effect of that demonstration upon the people who were attending. It is a fact shown by figures from army records that 75 per cent of the people cannot receive information by being told of it. Only about 25 per cent where you tell people about a certain thing will be able to use that information and put it into effect. That is the value of our demonstration work. These boys and girls get up and go through the process and it impresses people so much more and so many more people take home these ideas.

We have carried out demonstrations at the Iowa State Fair the last two or three years to good advantage, excepting that we have had so many of these teams sent in from the counties we are almost swamped, can hardly work out a program to take care of them. We strive to make room for them in some way, encourage them to come, because there is no reason why in some work like poultry culling we can't have a team working all the time. These boys and girls will do that very effectively. You will be surprised if you never followed that work how effectively the boys and girls who have this information carry out their part before people. They will do just as good a job—I often say I would just as soon have some of the boys and girls I have seen here at this state demonstration in extension work as some other demonstrators, because they are able to do as good a job.

In the matter of the stock judging contest there were about 200 who took part in it and I don't think there was anything of more interest.

We have good accommodations so far as they go for the boys and girls at the state fair, but they are crowded considerably. We haven't had sleeping quarters enough for our boys nor for the girls and are going to have to urge upon the fair board very soon that they expand as far as giving accommodations for sleeping. This last year through the courtesy of the fair board we put in a dining room where we feed the boys and girls at cost on the grounds, and we think we have thereby accomplished a good deal in establishing good feeling among the leaders over the state and among the boys and girls themselves. I have heard a good many favorable comments from leaders and fathers and mothers saying, "Now if the fair is going to run a dining hall where we are sure our boys and girls will receive proper food we will not hesitate to send them there for a week," whereas they have in the past hesitated on the grounds that it would not possibly be a very good thing for their boy or girl to go there and eat at any old place on the grounds. That I think is an important feature, one I certainly want to recommend to the management of the fair. Now I have spent considerable time in regard to these things and I have one or two suggestions or recommendations which I would want to leave before the board today. The first is in regard to the calf and pig club classes. I think there is a big problem that will have to be worked out and met before the next Iowa State Fair. We can expect almost double the number of calves and some increase in the pig club exhibits, and in these quarters something needs to be done there immediately.

As I have emphasized several times in going through this matter I think what I have said about state fair work in general applies to our district and county fairs because I believe that, in a smaller way, you have just as big an opportunity in your local community to serve these boys and girls as has the Iowa State Fair. I believe you can do just as much for them locally, and what I would urge upon fair managers at this time is this one point, to get busy immediately and try to work out with the people in your county who are interested in this work what is going to be done next year. Boys' and girls' club work is not something that can be decided upon about a month in advance of the fair, but to be successful must be taken up early. In these clubs, if they are animal clubs, the animal must be secured and put on feed and carried through several months before it is ready to exhibit at your fair, so that means work immediately with your county agent and clubs. In fact, a baby beef club is on feed at the present time and the pig club will come on very soon, so that would have to be done if you were going to carry on one successfully. I am sure on these questions you will find these various people who represent club work, local leaders, home demonstrators and the county agent willing and anxious to help out.

I was interested in some figures collected from published accounts which showed in Iowa the past year that the average county fair paid out about $120 for the boys' and girls' classes. Of course you realize some fairs did not put up any and some put up a considerably larger amount, but since it figured $12,000 offered it made the average about $120. We add that to about $9,000 which was paid through the Iowa State Fair and we have something like $21,000 as the amount offered in premiums to boys and girls. That is not very much when we consider this fact, that there are enrolled in Iowa in this boys' and girls' club work now about 15,000 members, an average of 150 boys and girls to the county. In the fair work this last year, as near as I could say, something like 10 per cent or 1,500 of the boys' and girls' club members took part in the Iowa State Fair. I have not figured how many took part in the local fairs. The first thing of importance now is to decide what can be done for the boys and girls in the clubs which they are organizing this coming year.

I think also some of you people who represent district fairs should think of the opportunity of putting on an interesting district contest. For instance, you know the Inter-State Fair at Sioux City is doing a large amount of work for the boys and girls not only of Iowa but of the central west. They are devoting a great deal of attention and money to that phase of the work and I am sure Mr. Eaton and Mr. Moore and others agree with me that it is putting a very interesting feature into their fair. They are also doing considerable up through the northwest Iowa counties. I believe the same thing holds true for any fairs which cover more than one county. I believe if you would go at it in time you would work up district contests there which would be very interesting and also would be very helpful to this work in that district. I hope that will be carried out in all districts where they cover more than one particular county, because I believe it adds very much to have inter-county contests. There is nothing like the boys and girls competing with one another.

The contest completed in Chicago last week was probably the greatest contest ever carried out; that was the national canning contest, and the prize was a trip to France to one of the teams. The Iowa team which won at the state fair canning contest last year was sent to the Inter-State Fair at Sioux City last fall and competed with twelve central west states, and as you might expect Iowa came out on top. So the winning team there was entitled to go to Chicago and meet the older teams from over the United States in the final contest. And in that contest, like every other contest held in Chicago last week, we are proud of the fact also that the Iowa team of club girls in Muscatine county were again on top and won this wonderful prize trip to France, which they will take beginning about next May, and go through the same work as in their own local community. They are going there to teach the people of France the canning method which they have used in their own homes and own club work in their county. That is the sort of information we have spread in our state, in our country, and we are going into other countries.

The boys' and girls' work such as is done in the United States has become an institution in this country, but it never has been much in any other country. Now a great deal of interest has developed all over the world and we are receiving requests for information as to how we do this work. I believe after this work is done in France this year we are going to have considerable helpful interest there, and probably a good many countries are going to proceed with it. I think that is specially interesting because it is one of the few things that has been originated in the United States. The school system is not limited to the United States alone. But the boys' and girls' club work is a big institution in the United States, with 600,000 boys and girls in it.

I forgot to mention one point I want to mention and that is the fact that while we have in this state 15,000 boys and girls enrolled, we haven't scratched the surface as to possibilities. There are on the farms of Iowa as near as we can get the figures from the census, about 225,000 boys and girls between ten and twenty-one years old, which is the eligible age for this work. When I said 15,000 enrolled you can see we have not scratched the surface, reaching but a small percentage of those who ought to be in the work, so I don't want to leave those figures on your mind thinking they are large and nothing is to be done in expanding them. We haven't begun to reach out and get the boy and girl that ought to be in. You will agree with me that if it is good for those 15,000 to be in this work it would be just as good for the other 200,000 not in it. I believe we ought to all combine our efforts along that line, and if we do it I believe agricultural work in this state will be more effective, and I believe there will be better practices introduced very readily.

President Cameron: The next speaker on the program is our Attorney General Ben J. Gibson, who I am sure has an interesting message for this convention.

Attorney General Ben J. Gibson: The fair that is a real success is the fair where everybody, farmers and business men, poor and rich, those in affluence and those in common estate, can just come in there and feel they are just on a level and it is their fair. If you have that feeling you are going to have a successful fair.

Among the things that appealed to me at the state fair were the horse shoe pitching, the horse racing, and these other things that are good ordinary sports. You know I have always liked to think of the amusing things in life, and in the last two or three years in this state and this nation we, as a people, know that there has grown up in America and in the state of Iowa a sort of condition of mind that has made us grouchy. I don't care whether you are business men or whether you are farmers that same feeling has come to you and it has come to me. Now I am not going to enter into a discussion of why that is or what it is, but I just want to strike this note, that Iowa is the same old state of Iowa; the same wealth, the same farms, the same bordering rivers of the Mississippi and the Missouri, and it is set here just like the same jewel that it was in the years gone by, with the same people, the same magnificent people that in stress of war in 1917 got together as one and lifted Iowa to a niche in American history that it will never be able to forget. In that connection I want to tell you an incident I have told a number of times in the past few years, of the time I passed down by the great library building in New York City during service. As I went by that building my eyes just happened to go up at the motto or sign that was over the building. I imagine there are thousands of other Iowa boys who saw the same sign, and that sign was simply this: "Buy bonds the way they buy bonds in Iowa." I want to tell you that sign was there to tell to the people in New York what was the real patriotic duty of American citizenship.

So our people were great then and our people are great now. The fact is this, that you have everything in Iowa that you have had in the years gone by, and as I listened to one of the speakers this morning I learned you have increased your crops by some 57 per cent during the past year. Really the glory of Iowa is just beginning. When you go downstairs, go down the big stairway and turn around and look at that glorious picture which speaks of the future growth of this state. Then as you go down just look up between the two pillars and behold these words: "Iowa—my eyes have been permitted to behold but the beginning of her glory." As you look at that just simply think, "Well now, it is all right for us to be grouchy, but we have got the greatest state in the union, let's just smile once in a while." We all just want to realize the fact that we are now as happy and as contented as we want to be and as we believe. I don't think for one moment we ought to be grouchy.

There are some things I want to talk to you about this morning from the standpoint of agriculture. You have all listened to a great many things with reference to agriculture, and of course agriculture, as you know and as I know, is the basic industry in America, in Iowa for instance. I have sometimes listened to men speaking and talking about different things in this state, and there has come to me this thought, that continually the business men of the state, and those with wealth and those who operate various industries in the state, should remember that 51.5 per cent, and more, that is the minimum, of the wealth of Iowa is invested in the Iowa farms. In addition to that there is another large percentage invested in the farm machinery, the farm stock and the farm crops. When you have two-thirds of the wealth of this state in one great industry you can begin to realize that that industry is entitled to the consideration of every citizen in the state, whether he is high or whether he is low, whether he lives on a farm or not. I have said in the past few years that I believe that in ten or fifteen years from today, unless this great work which has been referred to this morning continues to grow, the question is going to be how are you going to keep the boys and girls out there digging in this soil and planting the crops so that you and I and our children and our children's children may enjoy the foodstuffs with which to sustain life. So I say agriculture is the basic industry of the union and I say it is entitled to consideration in all its needs that come up. And I don't blame the farmer, I don't blame that man who is interested in agriculture for complaining about conditions when those conditions force him to a situation of operating his farm at a loss, whereas on the other hand, corporations such as the Standard Oil can declare from 400 to 1600 per cent stock dividends in the year. He is entitled to feel sometimes that perhaps everything is not just exactly as it ought to be. But through it all it seems to me this thought ought to come to the farming elements of Iowa, that it is by sound, sane thought that you are going to accomplish the real results sought; not by getting together and saying this is wrong and the other thing is wrong, but by getting down to brass tacks and working the problem out in a sane and scientific manner.

I believe that in the future in Iowa the agricultural department has a chance to grow, and grow until it is so great as to include things that are now not included here. The agricultural department should take deep and vital interest not only in those things which apply to the potato and corn or the cow, but those things which are really of greater importance perhaps, that is the real happiness of the people. I want to say that the real happiness of our people depends upon good government. Good government will do as much to bring happiness to the people as any other single thing. Now in the past few years we have watched the steady growth, not only in Iowa, but every state in the union, of the expenditures of government. I am just going to speak in that connection for a moment upon the budget, and in speaking of the budget you understand what I mean by the budget. It is easy enough to say budget and budget and budget, but unless there is something really at heart, some real good in the thing you may as well do as I said a few moments ago, "Give me liberty or give me death."

You and I have watched the steady increase in taxation during the past few years in Iowa, not only in the state but in the nation as well. I heard an old gentleman speak down at Muscatine in a meeting down there a year ago. I addressed the Farm Bureau, and he said, "Do you know, during the last few years it is just like this, we have just run our automobile so fast that the blamed thing has got beyond our control." We have gone on and on in taxation and increased expenditures. I don't want to complain nor do I want to be understood as complaining or to be misunderstood as condemning these wonderful things Iowa has had. I appreciate you are here trying to get more of this than I can give you because I have not that rhetorical flow necessary to bring these things to you, but I don't believe any of you, I don't believe there is a boy or girl, man or woman in Iowa that would surrender her wonderful school system for anything. I don't believe you would surrender any of the wonderful things you have, not for anything; her wonderful institutions for the unfortunate which are models for other states throughout the union—you would not surrender those things, nor would I. But sometimes I think this, I say why don't you as a people have in every city and town in Iowa a great cathedral equal to St. Peter's with beautiful pictures on the wall painted by Raphael, Rembrandt and Michaelangelo, and beautiful statuary in every corner, have marble floors and marble inlaid steps, and all those things. Why don't you have it? I will tell you why you don't have it. Simply because you can't afford it, that is all. The thought I have is this and it should be obvious, it seems to me, because it is a fundamental, that we should progress just as rapidly as we can, keeping always in mind the thought that as a people we must live within our income. And I want to tell you that you can talk about budget and you can talk about reduction in taxation, but if your people as a people, your state as a state, your county government as a county and city government as a city, will live within its income during the years, your taxes instead of going up will go down. There is not any question about the matter at all, with due regard to all who may disagree with what I say. Therefore it seems to me, in the enactment of a budget which is coming up, the heart of the thing is to compel living within income.

Let me give you an example. If I have a thousand dollars to spend during the coming year for the purpose of providing for my wife and children and myself clothing, food and necessary living, and I know that is all I am going to get during the year, what am I going to do on the first day of the year? I am going to so arrange my affairs that at the end of eleven months there will be at least a crust of bread on the table and clothing upon the backs of my children. In other words, I will budget that thousand dollars out so it will cover the entire period of time. Put on a sound, sane basis economy will do wonders in this thing of government. Now a budget is a wonderful thing, and I want to say to you that I believe the incoming legislature without question is going to adopt that. If that is applied throughout the state government, to every board and commission, to every state department and every state officer, coupled with a complete and absolute law which will compel living within income, I want to say to you it will do more to reduce taxes in Iowa than anything that has been done in the last ten or fifteen years.

The next thing I want to cover is the question of taxation. I want to call your attention to one thing in connection with the taxation question and that is with relations to farms. I can't conceive that it is proper and right to say that farm land shall be taxed at its market value upon the market. In the ordinary course of trade that is the usual basis, what it is bought and sold for on the market. No other class of property is taxed upon the same basis except land and perhaps town lots, because what a thing sells for on the market in the ordinary course of trade fails to take into consideration other elements, such as income and other things which have to do with the proportion of public burden. Everybody should bear his share of the public burden, whether rich or poor, whether high or low, whether he is in affluence or whether he is not, everyone should bear his share of the public burden, and I want to say to you that in the incoming legislature if tax revision is indeed sought, it should have one great thought at least in mind. That is that 51.5 per cent of the property of this state is entitled in the fixing of its value for taxation purposes to have taken into consideration not alone its market value but these other elements of value which after all determine what revenue if any that produces and returns to the man who is the property owner.

Now in conclusion may I just branch for a moment to my own department of the state government. I want to say to you who operate fairs, and to you who come from business houses in this state and who come from farms in this state, that the happiness of the people is not only dependent upon a reasonably operated government in so far as expense of that government is concerned, but perhaps more important than all is that security which we call obedience to law and order. I want to say to you that a nation or state without a people obedient to law and order is not a state, it is nothing more than an anarchistic congregation of peoples gathered together. I want to say to you that in the next five or ten years there is coming a contest between those who would have the law say to them you can do with this as you want, you can obey it or not as you see fit, apply it to the other fellow, but let me have liberty and license.

You know there is a difference between liberty and license. Liberty is the conduct of your affairs and mine so as to give the best not only to ourselves but to all who are around us; for the good of the whole community. License on the other hand starts when the personal feelings and the personal desires of the person who is seeking advantage does as he pleases. One leads to anarchy, the other leads to sound government. I want to say in your communities if you want to carry on a great work among the boys and girls, if you would have it so these boys' and girls' clubs you were speaking about this morning, your agricultural societies in your several counties in the state of Iowa, if you want to carry on the greatest work perhaps you can do to the state here, just seek to build in the hearts and in the souls of Iowa's people themselves a feeling that law and order is the cornerstone in this great state of Iowa.

President Cameron: This will complete our program for this morning and the convention will stand adjourned until 1:30 p. m.

WEDNESDAY, DECEMBER 13, AFTERNOON SESSION, 1:30 P. M.

President Cameron: Gentleman, you will please come to order.

The Stowe Mothers Quartet was introduced to the convention and rendered a number of vocal selections.

President Cameron: I take pleasure in introducing to the convention, Mr. H. O. Weaver, of Wapello, Iowa, who will give you a historical sketch of the Agricultural Societies and the State Fair.

Mr. H. O. Weaver: The agricultural associations of this state, when viewed in the light of the development of our great state, form a most important organization. The agricultural society, with its exponent, the Iowa State Fair, links with it the county and district associations of the state, the influence of which reaches every township and hamlet within our borders.

To my mind it has shown the greatest development from its inception of any department since the organization of the state. It has proven to be the greatest benefactor in the state's development, and it is interesting to know the progress that it has made since Iowa was admitted to the union.

The spirit of the agricultural societies had its origin among the pioneers many years before Iowa became a state. The pioneers who came into the state and settled the counties along the Mississippi river saw very early the agricultural possibilities of what was then an unknown country so far as agricultural pursuits were concerned. The nucleus of their representative gathering in southeastern Iowa, represented by the counties of Des Moines, Jefferson, Van Buren, Scott, Louisa and Washington early began to contend with each other in their meager way for the betterment and making of this commonwealth, and like the early religious camp meetings, they were itinerant, and they held their annual meetings in the various counties then organized. These early societies did not have a permanent home. They held their meetings first in one county, then in another, but the spirit of the association has been one of steady and permanent growth. These early pioneers came westward in their linchpin wagons, and they brought with them such equipment in the way of scrub horses, "elmpeter" hogs, and what they called the old Durham cow, which furnished most of the sustenance of the family during the long and tiresome trip from Ohio or some eastern state. They drove to the first meetings of this association in their prairie schooners, taking with them such products as they could show their neighbors the result of their year's work. The hawthorn and crabapple tree were the permanent shelter for the animal exhibits. The specimens of such grains as they had brought with them, a sample of the improved clapboard skillfully made with the axe and froe, the handwork of the good wife and daughter in the way of homespun garments, these were there exhibited under the shelter of some friendly oak or elm. The first race-course was some open prairie field previously occupied by the Indians in their native sports, and it was here that the family pride of Kentucky first contended with the most alert of the Indian ponies. I was told by my grandfather when a boy that one of the most skillful contests was with the squirrel rifle held at one of these gatherings where it required three days to award the victor who received for his exhibition of skill a home-made bag for his gun equipment and five pounds of long green tobacco.

It will thus be seen that the early pioneers contended with each other to excel in the things that they possessed. From one gathering to another as the settlement spread westward a great improvement was seen in all avenues of agriculture and stock breeding. These gatherings soon attracted the attention of some of our ablest men who attended them annually and participated in the contests for supremacy. The early records of these associations will show the names of such men as Judge Mason, Judge Wright, Governor Grimes, Governor Kirkwood and John Henry Gear, who foresaw the importance of such an organization in the development of the resources of this state.

So great was the progress and effort of these men upon the improvement of stock breeding and agriculture, that very soon after these local organizations attracted the attention of the legislature, and during the administration of Governor Hempstead the Third General Assembly, then seated at Iowa City, the capital of the state, passed a bill in 1850 for the encouragement of these societies and provided that whenever a county or district society should be organized and had a paid-up subscription of twenty-five dollars, they could upon proper showing, draw from the state treasurer of Iowa a like sum of twenty-five dollars for their work, but in no case should any society draw more than fifty dollars per annum from the state treasurer. This money was to be expended to foster and encourage the work of improvement of agriculture. It was during the administration of Governor Grimes in 1857, when the laws of the state were being revised, that this association may be said to be founded, and one of the provisions of this law was that any county or district association, upon proper showing and qualification, could draw from the state treasurer the sum of two hundred dollars. This original bill, as passed under the Grimes administration, provided for a representation in the state association, practically as we have it today. During every legislature from that time until the present time something has been done to amend the law pertaining to this association to meet the demands of the present development of agriculture. Finally, this society, upon the purchase of a tract of land, found a permanent home in Polk county where it stands as a pre-eminent factor in agricultural development among the states of the union.

The growth of this association has kept pace with the organization of the various counties in the state and has furnished an incentive and education for the gradual and final development of our agricultural pursuits. We who deal with the association today cannot help but admire the thought and wisdom of the founders of this society and the laws that govern it. Every county or district fair association may become a part of the state association and receive from the state such aid as the rules of the association provide. Ninety-five county and district fairs were held in this state in 1922. The representatives of these associations have a voice in the state fair association, thereby linking the community interests of the state with that of the parent association. During the past year these fair associations have received aid in the sum of $168,000.00; fifty-one fairs receiving the limit of $2,000.00; the average state aid being $1,770.00 each.

The county and district fair associations, now aided by the zeal and interest of the farm bureau and other like associations, form a part of this development system that certainly is most creditable. It is through these various county and district organizations that the representatives of every group of agriculture, horticulture and stock breeding become interested. They are able to touch the farmers and breeders in the various localities, the boys and girls who are now sharing the operation of their management, and will sooner or later become a most potent force in carrying on the future and further development of this, our great industry. The result of the contests in the various counties and districts are evidenced at the state fair, and I cannot overlook the great importance of the county and district work and believe that more encouragement should be given these various societies.

To my mind the spirit of the Iowa farmer and his loyalty to the best interests of the state and these societies has been best shown in the two years that have passed, and it is needless for me here today to state the condition in which he has been placed under the clouds of depression. In olden times before a battle, the greatest burdens and discouragements were heaped upon the soldiers of battle to test their steel of endurance and loyalty. Such a test has been applied to the farmers and stock breeders of this state. Their true metal has been shown, when under disappointment and reaction, they gathered together their implements of toil and went into the fields with renewed vigor and cultivated the soils of Iowa that she might produce an increased crop to help feed the world's population. After they had sold the first year, the result of their toil which was found to be grown at a loss, they again took up the plow and reaper and garnered their grain to find their accounts were still over-drawn at the bank, but this in itself did not shake the faith that they had in their state and in the government of the United States. And while promises of relief and legislation came from various quarters and greatly encouraged and in many instances did assist in partially relieving certain conditions, yet they made up their minds that the farmers' economic problem would finally be solved by work and energy with close application to the saving of their hard-earned money, and hoping at the same time that should the wisdom of congress open up a market with the East, lower the freight rates and reduce any unnecessary taxation, they would regard it as a great assistance and a grateful benediction.

Many of our farmers and breeders viewed the situation from another angle and went about their work, though handicapped, and as they had lived to see the tide of prosperity come and go, they resolved in their minds that they might be ungrateful for past blessings and benefits if they should come to believe that it was meant for them always to live in a high period of prosperity. This class concluded that they could not expect to use the reaper all of the time in season and out of season, but for the permanent endurance of their business it would be just as well that a check of inflated prices should come, in order to relieve some of their fields of the thistles that had grown and been overlooked during the period of high prices, and finally by experience bring the conditions into a state of affairs, through various causes, where the farmers' products will continuously bring a fair profit, and the profits which he has to pay for necessities will vary in proportion to the profits which must fall to him. It is very difficult to think of a law to be passed by congress or the state legislature which will not in some degree affect the permanent agriculture of this country. It is the wise statesman who will ever bear this in mind when in dealing in any legislation affecting the welfare of this country that the building of such laws must be aimed to protect its greatest industry, agriculture, and not detract from a reasonable profit to the producer. We will never have a satisfied condition until the farmer is able to reap a reasonable profit for his labor.

I cannot refrain from calling attention to the extreme loyalty of the Iowa farmers. The world's greatest poet and delineator of character once said: "Blow, blow, thou wintry blast, thou are not so unkind as man's ingratitude." Never, my friends, never were the words of that learned poet brought more forcibly to mind than on last November election when the farmers of Iowa, bowed down with taxes and disappointments, marched to the polls of this state and paid a debt of gratitude which they owed the boys who shared the discomforts of the World's War. This will stand out in the future history of Iowa as one of the monuments of gratitude of its people.

The farmers and breeders of Iowa went back to their plows and herds under such conditions. They voted a bonus to our boys, believing in the faith of their state and government. That same faith in the people and the constitution of the United States will keep Iowa at the head of the states of this union, bearing as its motto, agriculture.

I have always been pleased to represent this state in the association of one of its principal breeding industries. It has always been my great pride to know that this state stands first in breeding cattle; has stood first rank in the matter of pure bred hogs of the country, and my association with these societies has led me to believe, however, that if Iowa is to hold her place as a leading state in the industries that I have just mentioned and our state fair supreme in its exhibits that it shall be the duty of every member of this association to appeal with a renewed vigor for the protection and the saving of many of the herds of this state. Iowa's place is well known for these products from the fact that the pure bred industries of the state of Iowa have stimulated and educated our farmers and breeders for better livestock. Within the past two years many of our best herds of cattle and hogs have been sacrificed to meet the demands that have been made upon their credit, and I cannot refrain on this occasion from calling attention to the loyalty and far-seeing policy that has been heretofore adopted by the banks of this state. The careful banker of this state knows that a falling off of the products of Iowa reduces his deposits. The growth of better livestock will increase his deposits. The bankers have the thanks of the state for these policies, but I urge upon the members of this association and all present who are interested in the future good of the state that these policies shall continue and that an extension of time be given upon these loans to your breeders until they can receive a fair profit for the money which they have invested in these pure bred herds. I know of no one thing that would be so detrimental to this state as to be forced to send to the "block" the pure bred hogs and cattle of this state which has required a quarter of a century to produce. Every county and district fair director should see to it in his own locality that this industry shall not be crippled and be made to suffer because of a little time wanting for adjustment. The improvement of livestock in Iowa has only reached a fair stage in its progress. Only 3½ per cent of the cattle in Iowa are pure bred, and I believe the pure bred hogs are in the same proportion, yet, upon this small per cent of herds the farmers and stock raisers of Iowa must depend for the increased production in pork and beef. The best herds in England have remained in the same family for a period of two hundred years. Therefore, in this state where production is so promising, why sacrifice the greatest asset in our total resources.

I repeat that it has been a great pleasure for me to represent Iowa in this breeding association. The matter of appropriations comes up before these bodies and the first thing that you hear is, "Well, what does Iowa want? How much is Weaver going to tax us this time?" I want to say to you that the state of Iowa, and the state fair itself has received from the breeders of this country more money to pay out at the Iowa State Fair than any other fair in the United States; and they give us the place because they know that out here in Iowa are the greatest development, the greatest showing and the greatest merit of all exhibits of any place in the United States. Consequently, it was easy for us to get these appropriations and put them in the state here which have helped to make the great exhibits that you have seen in the past, and I want to repeat again, gentlemen, I want to repeat again to you that the time has arrived for each and every one of you to look carefully into your own county and district to see that the stalls at our next state fair are filled up with the same kind of cattle that must compete with Ohio, Illinois, Kansas and Nebraska, and you can do this, by simply going to your banker and saying, "Here, if that man needs a little more time to protect his herd and protect it for the state of Iowa, give it to him. It is only a matter of a few months or a year's adjustment." I thank you.

President Cameron: We have on our program this afternoon, an address by Governor Kendall. I have just learned that the Governor has been unexpectedly called away and will be unable to be with us. Mr. L. R. Fairall, Advertising Director for the Iowa State Fair, has consented to give us a short address on "Advertising for Fairs", which I believe will be of interest to all of the Iowa Fair Managers.

Mr. Fairall: I would like to talk to you with the feeling that you and I are just sitting down here for a few moments' discussion of the question of how much a fair should spend for its advertising and how that money should be spent. I know that is a question which is worrying every fair year in and year out. We have all heard men say that you can't spend too much for advertising. That is absolutely untrue and we know it. We have also heard men say that a fair needs no advertising, that a good fair will advertise itself. You and I also know that that is equally untrue. We might as well say that a fair does not need any attendance as to say it does not need any advertising. You spend twelve months in the year in assembling things for your county or your district to come and see. If you don't tell people what those things are, what is the value of the twelve months that you have spent in gathering them together? In the final analysis if you take the attendance figures, if you take a poll of the successful fairs over a period of years, you will find that the success or failure of your fair, or any other fair, can be made through advertising. Good advertising will make your fair successful. Poor advertising or lack of it, will be one of the greatest contributing features to the failure of your fair. That is why more and more the fair managers are devoting increased thought and money to the subject of advertising and publicity.

Now just for a minute, chiefly for the ideas there might be suggested in it, let us review the program of advertising and publicity that is carried on each year by the Iowa State Fair. The state fair's advertising and publicity program is divided into a great many departments to cover the different kinds of people in the state of Iowa and appeal to their individual interests. I will take them, not in the way in which they are carried out, but just in the order in which they occur to me as I have noted them down here.

One of the most important things in the program of the Iowa State Fair is the bi-monthly publication issued by the state fair management and department of agriculture called "Greater Iowa." This goes to approximately eighteen thousand people in all parts of the state, farmers, breeders, fair men, county officials, and others, who are in a position to promote and create and increase interest in the state fair. It contains a great deal of information on subjects related to agriculture in general, seeking to be helpful to the man who wants to make his farm produce more. In the columns of this publication, at the same time, we are pointing out to the people of the state the value of the state fair, its notable features, how the breeder can make the fair serve his interests, where the farmer can profit by attending the fair, and such things as that. The people are receiving this publication throughout the year and the fair is kept before them as one of the great institutions of the state.

In May, as soon as the dates of the fair are decided upon, we send out approximately three thousand large hangers or calendars to banks, commercial clubs, garages, implement dealers, and prominent people. They are hung in offices and stores all over the state, so that people may know the dates of the state fair and may fix those dates in their minds. This also starts a little talk about the fair which is helpful in our later publicity.

The next publicity features come along in May and June when we start our first preliminary news publicity. This is broadcasted over the entire state through newspapers and farm papers, to let people know that we are again preparing for a big Iowa State Fair. It starts to create discussion which later results in getting the crowds down there. Along in May and June we also insert some advertising in the live stock papers, breeders' papers and farm papers, telling the advantages of exhibiting live stock at the Iowa State Fair, and letting them know the premiums that are to be offered. A great number of breeders write in as a result of these advertisements and they are proving to be one of the most important factors in keeping a new and constantly increasing list of exhibitors in the live stock departments. If we relied entirely on the old exhibitors all the time, some of these men going out of business, some leaving and some going to other states, our exhibitors would dwindle. This advertising keeps a constantly new list of breeders and exhibitors coming on to show at the state fair.

Then in July we concentrate on our news publicity. During May and June each year we carry in the newspapers stories about all sorts of features connected with the fair. Not only newspapers in Des Moines, but all over the state. The first of August or last part of July we send out something like three thousand columns of plate matter to over 450 newspapers scattered throughout the state of Iowa. This embraces reading matter already set up, ready for these papers to print. It consists largely of pictures—pictures of the fair grounds, pictures of attractions coming here, pictures of live stock to be shown at the fair, and things of that kind. These papers are glad to get it and nine-tenths of it is run free of charge. Along with this plate matter we send them two to four ads which are paid for. These ads are intended to appeal to various classes of people. In one advertisement we will talk to the farmer and breeder who would come down to the fair to get some new ideas on live stock. Another advertisement is calculated to appeal to the person who wants a vacation and wants a good place to spend a week of enjoyment. Another appeals to those interested in boys' and girls' club work. One advertisement aims at one particular class at a time.

That is one of the secrets of good advertising. You can't talk to everybody on all kinds of subjects in any one ad and get any results from it.

About this same time we distribute through the railroads, to every railway station in the state of Iowa, a series of hangers and cards bearing the dates of the fair, some attractive pictures of horse racing or live stock. Along with these quite frequently we send out heralds and hand bills which are hung up in the railroad station where people can jerk them off, put them in their pockets and read them on the train. Through all this literature is an effort to show these people where they, directly, will profit by and enjoy attending the state fair.

About the first of August we start our display advertising in the farm papers. That advertising runs for three weeks, talking to the farmers about the educational value and amusement value of the fair. About the first week in August we also start advertising in the Des Moines papers, following the same general outline as above, although using larger advertising than in the farm papers. We also put up 160 large billboards August 1st, covering the territory from which people come to the state fair. These are on main traveled roads, in towns, in cities. In the city of Des Moines and near Des Moines we also put a number of window cards in the store windows about two weeks before the fair starts.

In the state fair's advertising we have found that we get the greatest results with our money by spending it in the territory where we have the best opportunity to get people to attend. In other words, clear up on the Minnesota line it is three times as hard to induce some one to come to the state fair as it is at Perry where they only have to come a short distance. That is the plan we follow and the bulk of our advertising money is expended within a radius of seventy-five or a hundred miles of the state fair. There is where we get the most attendance for our money, and that is what the fair advertising wants to do. That same principle may well be adopted by any fair anywhere. Plan your advertising so you will get the bulk of it in the territory where it is easiest for the people to reach the fair.

Now to take up different appeals in the advertising. We put on a survey here at the fair last year to try to find out why people came to the fair. Strange as it may seem, nine-tenths of the people who answered that inquiry around the fair grounds said that they came to see the horse races and the fire works, and the hippodrome, or something of that kind. Incidentally, of course, they would not have come to the fair if it had not had all the live stock and agricultural exhibits and things of that kind. But in the final outcome they made up their minds to come because they wanted to see some of the entertainment features. Now, I believe that in all of our advertising we should exploit the educational advantages of the fair, give full play to the live stock and farm products, but at all times remember that the amusement features probably will give us the greatest results in the actual cash receipts at the gate.

Another idea which we carried out this year and have promoted for several years is that of arranging for special editions of the local newspapers just before the fair opens. A newspaper is very prone to go into anything that produces a greater volume of advertising for it. If you can get your local newspaper to undertake to put out a special edition and solicit advertisements, they will do the work and you will get the columns for news material in connection with that fair edition. We also run our complete daily program in the papers. We do this in exchange for tickets.

Another "stunt" that works out nicely is to get a group of enthusiastic people to appear before your various clubs, men's clubs and women's clubs, to boost the fair and urge people to turn out and see the fair. The Chamber of Commerce undertook that last year with splendid results. I believe there was more boosting on the part of the people of this city last year and more real effort to entertain the fair visitors than there had been for a long time.

The average state fair expends approximately 10 to 12 per cent of its gross income for advertising. That is taken from statistics from fairs all over the United States. The Iowa State Fair expends approximately 7 per cent of its gross for advertising, so you see we keep pretty well within the limit. The average county fairs, as reviewed from figures which you will find in Secretary Corey's report here, spent for advertising in Iowa this year from 16 per cent of the gate to one per cent. You can see there is quite a wide range in this field. There might be a great deal of good done by a committee of this organization getting together and determining what percentage is wise for a county fair to spend for advertising purposes.

Now just a few further suggestions which you may find of value when the time comes to put on your fair next year. The first suggestion I have and the most serious suggestion is that, before you do a single thing, you sit down and plan a definite budget for your advertising. It is very easy to have a salesman come in and sell you one sort of advertising and another come in and sell you another, and before you know it you are spending more than you should on advertising. It is equally easy to keep these expenses down to almost nothing, and the first thing you know you have not spent enough for advertising. Both are equally disastrous. The best plan is to take every kind of advertising you can find, weigh them all in considering your budget, and then select those media which will give you the most attendance for your money.

Now what are these media? I would first recommend newspapers. They should be the backbone of the advertising campaign of any fair. I would not rank the display advertising as highly as I would the publicity. A good thing is to get your editor or editors personally interested in the fair. Sometimes you may put your editors on the fair board and make them real boosters. In your newspaper publicity don't limit yourself to your own local papers. Send stories by mail to the papers all around your territory. They will use them if they are written in good style. Another suggestion is, don't tell everything in one story. A string of good stories has more value than one big one. You can get stories about your amusement program, the horse races, the anticipated attendance, dope stories about what your fair is going to do, stories on the various attractions, a mayor's proclamation urging attendance and support of the fair, and you can get some good stories on the early historical development of your fair.

The second chief features to be considered are billboards, hangers, window cards and like media. I believe that on a fair advertising program there should be a certain number of billboards and a certain number of window cards and posters, because they fix the name and dates of the fair in people's minds and keep urging them so no one can forget.

The third good stunt many fairs use is to get out a herald or hand bill. This may be one page or it may be two or four pages. They distribute them in stores and hang them around the postoffices and in automobiles parked on the streets. They follow the plan the circus follows when it comes to town. The circus people do about as shrewd advertising as you will find any place, and they use heralds and handbills in profusion.

There are some fairs who still make the mistake of buying specialties, trick advertising stunts, whistles and pencils and things of that kind. You must interest people in your fair, you must sell the fair to them if you are going to get them to attend. I never saw a whistle or pencil yet that could convince anyone that they ought to attend a fair.

Another plan which some fairs have employed successfully, is to go to one of their local newspaper men and pay him a hundred dollars and make him responsible for all of the advertising and publicity connected with the entire fair. You gentlemen are very busy men just before the fair, yet that is the time when you should have the most publicity. You haven't the time to devote to promoting the many publicity features which make your fair successful. Fifty or a hundred dollars paid to some local man who is capable will give you many, many times that much in actual cash returns. Make him responsible, make him feel he has to get out the attendance, and if you put it to him in that way he will get the publicity for you.

Another thing that many fairs should do is to make good use of the material which is furnished them by the various attractions. A number of the better attractions now-a-days furnish stories, ads, pictures, billboard paper and material of that kind free of charge. That is a wonderful help to you if you will make use of it. It is just that much free material which you would have to pay for otherwise.

Before I close may I suggest that the advertising department of the state fair here is on the job the year 'round and we are ready at any and all times to be of help to the county and district fairs of the state. If a question concerning any of your advertising and publicity ever comes up we would appreciate it if you would drop us a line and let us assist you.

The most important thing about your advertising, about your publicity I think is the enthusiasm that you get into it. If you can arouse your community, arouse your newspaper men and get your board, your farmers and breeders enthusiastic over the fair, your fair will be a success. That, after all, is the object of all advertising.

Mr. Moore: May I ask a question? I would like to ask Mr. Fairall what percentage of the gate receipts the State Fair spends for advertising?

Mr. Fairall: Eleven per cent this year. The general figures on state fair advertising appropriations are made up on the basis of gross receipts.

President Cameron: No doubt you have all heard of the wonderful achievements of Iowa at the International Live Stock show at Chicago last week. We have asked Dean C. F. Curtiss to give us a short review of Iowa's achievements at the International Live Stock Show and Exposition.

Mr. Curtiss: In the International Students' Judging Contest with twenty teams competing, Iowa won first with a wide margin of seventy-seven points over the nearest competitor. Our boys made a wonderful record both as individuals and as a team. Not only did our team rank first, but J. C. Holbert was high man in the contest; H. B. Boyle was fifth; and J. H. Hilton tied for eighth. You will note that the men ranked high on the individual classes of live stock. It is also interesting to note that three of the top four, or four of the top seven, teams were coached by Iowa State College men.

Winnings On Fat Barrows

In the strongest fat barrow show ever held, Iowa State College made the greatest winning on fat barrows on all breeds ever made by any institution. We exhibited a few of each of six breeds of hogs and in the case of each breed won some blue ribbons while purple ribbons denoting championships were won in five out of the six. A total of 67 ribbons was won, totaling cash prizes of over $2,000.00. A few of the chief awards follow:

Grand champion pen of barrows of the show, all breeds competing, won on Poland Chinas bred, fed and exhibited by Iowa State College.

Reserve grand champion barrow of the show on a Poland China barrow.

Grand champion barrow in the carcass contest on a Berkshire.

Champion pen of three Poland China barrows.

Champion pen of five Poland China barrows, get of one sire.

Champion Poland China barrow.

Champion pen of Chester White barrows.

Champion Hampshire barrow.

Champion pen of Hampshire barrows.

Reserve champion pen of Duroc Jersey barrows.

Reserve champion Duroc Jersey barrow.

Winnings On Iowa State College Sheep

In the Oxford breeding classes, we exhibited the first and second prize yearling rams; first and second prize yearling ewes; champion ewe and champion ewe of the show in addition to some third, fourth and fifth prizes. In Southdowns we had champion American-bred ewe. In Rambouillets, Hampshires and Shropshires, some second, third and fourth prizes were won.

In the fat wether show we had the champion Oxford wether, the first prize pen of three grade wethers and the champion five head of wethers of the show, all colleges competing.

While we were showing our Clydesdales, Mr. George Cluett, of Williamstown, Massachusetts, presented to Iowa State College, the great mare, Fairholme Ruth. This mare was grand champion at the 1918 International.

Winnings On Iowa State College Horses

We exhibited only a few horses at the International and all that we exhibited were yearlings and foals bred and developed by Iowa State College. All of the yearlings won prizes in very stiff competition.

Winnings On Iowa State College Steers

Our college steers did not make as good a showing as they have many years in the past. However, the competition was exceedingly keen and we are striving to have a much better lineup for next year's exposition.

We won first in the senior yearling grade Hereford class on Aledo. Had the champion grade steer sired by a pure-bred Hereford sire. Black Don, pure-bred senior yearling Angus steer, won first prize in the show for carcass steers on foot and second on the block. Black Knight was second of the junior yearling steers on foot, while Pan won fourth on the block. Dauntless, our pure-bred senior yearling Hereford steer, won fourth in the strongest class of Hereford steers ever shown at the International. Our grade Hereford herd of three steers won first prize.

Midwest Intercollegiate Poultry Judging Contest

In the Students' Poultry Judging Contest held at the Chicago Coliseum Poultry Show, the Iowa State College team won first, with a margin of 135 points. The judging contest is divided into two parts, judging for exhibition and judging for egg production. C. A. Shellabarger, of Ames, tied for first place in exhibition judging and L. C. Deal, of Ames, was high man in production judging. Iowa State won the rotating large silver cup that is awarded to the sweepstakes team, permanent possession to be given to the institution winning it three times; first exhibition team, silver cup, permanent property; first production team, silver cup, permanent property, and a permanent cup for the sweepstakes team. This poultry judging team was composed of students classified in the collegiate courses, thus, was an entirely different team from the one that carried off sweepstake honors in the Noncollegiate Poultry Judging Contest held at the American Royal two weeks earlier.

Four of the men, composing our International Students' Judging Team, were also members of the judging team winning first honors at the National Swine Show contest held early in October, thus, Iowa State College has had a very successful season in the judging contest work, our team at the National Dairy Show having ranked third in competition with nineteen other teams.

Boys' and Girls' Club Work

In the boys' and girls' club work, Iowa made an outstanding record. The girls' canning demonstration team won first, which carries a trip to France for the team and its instructor, where canning demonstrations will be given by the team during the coming summer.

In the baby beef club work, Iowa won first and grand champion on a steer that was exhibited in the baby beef show at the Iowa State

Fair. In the junior judging contest, with nineteen states competing, the Iowa boys won second.

President Cameron: We will now have the report of the Committee on Credentials:

REPORT OF COMMITTEE ON CREDENTIALS

We, your committee on credentials, report the following list of delegates entitled to vote at the State Agricultural Convention, December 13, 1922:

COUNTY AND DISTRICT FAIRS

Adair	F. A. Gatch, Greenfield
Adams	S. C. Scott, Corning
Allamakee	C. G. Helming, Waukon
Audubon	R. D. Hawks, Audubon
Benton	D. L. Bryan, Vinton
Black Hawk	E. S. Estel, Waterloo
Boone	Harve Helphrey, Ogden
Bremer	Joe P. Grawe, Waverly
Buchanan	C. H. Gould, Aurora
Buchanan—Independence	H. C. Kieth, Independence
Buchanan—Jesup	J. P. Hess, Jesup
Buena Vista	Roy H. Wilkinson, Alta
Butler	J. C. Carter, Allison
Calhoun	J. C. Hoag, Manson
Calhoun—Rockwell City	Andrew Stewart, Rockwell City
Carroll—Carroll	Chas. H. Parsons, Carroll
Carroll—Coon Rapids	Goodwin Garst, Coon Rapids
Cass	Roy L. Fancolly, Atlantic
Cedar	C. F. Simmermaker, Tipton
Cerro Gordo	Chas. H. Barber, Mason City
Chickasaw	N. H. Bloom, Nashua
Clay	L. W. Emery, Spencer
Clayton—Elkader	Raymond G. Tieden, Elkader
Clayton—National	A. J. Kregel, Garnavillo
Clayton—Strawberry Point	M. G. Arnold, Strawberry Point
Clinton	G. H. Christensen, DeWitt
Crawford	C. P. Harvey, Arion
Crawford—Schleswig	H. A. Boysen, Schleswig
Dallas	H. C. Modlin, Perry
Davis	T. H. Welch, Belknap
Decatur	A. M. Akes, Leon
Delaware	E. W. Williams, Manchester
Des Moines	Wm. B. Hunt, Burlington
Dubuque	C. F. Ferring, Dyersville
Fayette	H. M. Stafford, West Union
Fremont	J. S. Athen, Hamburg
Greene	E. C. Freeman, Jefferson
Grundy	R. R. Clark, Grundy Center
Guthrie	H. A. Covault, Guthrie Center

Hamilton	H. M. Evans, Webster City
Hancock	L. T. Nutty, Britt
Hardin—Ackley	Geo. Humphrey, Ackley
Hardin—Eldora	W. H. Rowan, Union
Harrison	J. J. Owen, Missouri Valley
Henry—Mt. Pleasant	Frank Price, Mt. Pleasant
Henry—Winfield	Russell Canby, Winfield
Humboldt	R. J. Johnston, Humboldt
Ida	Frank R. Kerrigan, Ida Grove
Jackson	E. A. Phillips, Maquoketa
Jasper	E. J. Failor, Newton
Jefferson	Chas. H. Ross, Fairfield
Jones	L. W. Burns, Anamosa
Jones—Monticello	Thos. J. George, Monticello
Keokuk	A. L. Humes, What Cheer
Kossuth	S. D. Quarton, Algona
Lee—Donnellson	H. B. Hopp, Donnellson
Lee—West Point	John Walljasper, West Point
Linn—Central City	E. E. Henderson, Central City
Linn—Marion	E. E. Parsons, Marion
Louisa	R. S. Johnston, Columbus Junction
Lucas	H. E. Thorne, Derby
Lyon	W. G. Smith, Rock Rapids
Mahaska	J. C. McClure, Oskaloosa
Marion	Seth Way, Knoxville
Marshall	F. C. Davis, Marshalltown
Marshall	C. E. Arney, Albion
Mills	C. R. Brothers, Malvern
Mitchell	J. A. Kildee, Osage
Monona	Ed Rowlings, Onawa
Monroe	F. P. Douglass, Albia
Muscatine	V. H. Birkett, West Liberty
O'Brien	W. S. Ayers, Sheldon
Page	Guy Mitchell, Shenandoah
Page	C. A. Wenstrand, Shenandoah
Plymouth	G. E. Held, LeMars
Pocahontas	Benita Linnan, Fonda
Pottawattamie	Ed. F. Oxley, Avoca
Poweshiek—Brooklyn	R. O. Heathwole, Brooklyn
Poweshiek—Malcom	James Norvak, Malcom
Sac	W. F. Weary, Sac City
Scott	M. E. Bacon, Davenport
Shelby	W. E. Cooper, Harlan
Sioux	H. J. Vande Waa, Orange City
Story	E. H. Graves, Ames
Tama	E. Mericle, Toledo
Taylor	John Thompson, Bedford
Van Buren	W. B. Tade, Hillsboro
Wapello	L. W. Hall, Eldon
Warren	C. G. Maxwell, Indianola

Wayne	F. B. Selby, Corydon
Webster	H. S. Stanberry, Ft. Dodge
Winnebago	T. E. Isaacson, Forest City
Winneshiek	M. M. Curtin, Decorah
Woodbury	F. L. Eaton, Sioux City
Worth	N. T. Christianson, Northwood

FARMERS' INSTITUTES

Adair	R. J. Reed, Greenfield
Bremer	J. D. Hadley, Waverly
Buena Vista	W. C. Skiff, Storm Lake
Buena Vista	Geo. Schaller, Storm Lake
Davis	C. W. Clarke, Bloomfield
Franklin	Florence Osborn, Geneva
Johnson	Ray E. Smalley, Iowa City
Polk	S. J. Stoddom, Granger
Polk	Jas. H. Deemer, Des Moines

COUNTIES IN WHICH NO FAIRS ARE HELD

Franklin	C. H. Scantlebury, Hampton
Johnson	L. R. Morford, Iowa City
Madison	T. J. Hudson, Winterset
Polk	M. L. Markham, Des Moines
Ringgold	Harry A. Laird, Mt. Ayr

STATE BOARD OF AGRICULTURE

Ex-Officio Members

State Veterinarian	Dr. Peter Malcolm
State Food and Dairy Commissioner	R. G. Clark

OFFICERS

President	C. E. Cameron, Alta
Vice President	J. P. Mullen, Fonda
Secretary	A. R. Corey, Des Moines
Treasurer	F. E. Sheldon, Mt. Ayr.

DISTRICT MEMBERS

First District	H. O. Weaver, Wapello
Second District	E. T. Davis, Iowa City
Third District	Earl Ferris, Hampton
Fourth District	E. J. Curtin, Decorah
Fifth District	C. A. Tow, Norway
Sixth District	T. C. Legoe, What Cheer
Seventh District	C. F. Curtiss, Ames
Eighth District	J. C. Beckner, Clarinda
Ninth District	Carl E. Hoffman, Atlantic
Tenth District	Sears McHenry, Denison
Eleventh District	H. L. Pike, Whiting

H. L. PIKE,
H. M. STAFFORD,
R. S. JOHNSTON,
Committee on Credentials.

President Cameron: You have heard the report of the Committee on Credentials. A motion to accept the report will be in order.

D. V. Moore, Woodbury County: I move that the report of the Committee on Credentials be accepted, and the committee continued so that if any other delegates report they may be added to the list.

Motion was seconded and carried.

President Cameron: We will now have the report of the Committee on Resolutions.

R. R. Clark, Chairman, Grundy County: Gentlemen: I desire to present the following resolutions which have been drafted by the Resolutions Committee:

"We desire to congratulate the Management and Officers of the Iowa State Fair on the eminently efficient and successful management of the fair and all work pertaining to the State Department of Agriculture in the crucial period that has been passed during the current year, and we pledge our hearty support and co-operation in the conducting of future fairs and other work of the State Department of Agriculture that is rendering such valuable service to the agricultural and industrial interests of Iowa."

"We desire to extend our hearty congratulations to the Girls' Club contestants from Iowa at the International Live Stock Exposition on winning the highest honors in that competition including a trip to France where further demonstrations will be given; To the Junior club boys of Iowa on winning the Grand Championship in the baby beef contest at the International, and second in the Junior live stock judging contest. To the College students of the Iowa State College on winning the highest honors in the collegiate live stock judging contest at the International, with twenty states competing, and the highest honors including every first prize and every trophy offered in the International Poultry Judging contest.

"We desire to express our sorrow and sympathy, and our high appreciation of the great public service of two of the State's most eminent citizens, who passed away during the year and who served the State most honorably and efficiently in many capacities; and we wish to refer especially to the service of Hon. W. W. Morrow and Captain Albert M. Head, each of whom served the State Department of Agriculture as President and Treasurer successively."

R. R. CLARK,
C. A. WENSTRAND,
C. F. CURTISS,
Committee on Resolutions.

R. R. Clark, Grundy County: I move that the resolutions be adopted.

Motion was seconded and carried.

President Cameron: There being no special committee to report at this time, the next order of business will be the election of the Officers and Directors of the State Board of Agriculture.

Mr. Mullen, vice president, taking the chair stated that the first order of business under this heading would be the election of a president of the State Board of Agriculture for the ensuing year.

F. L. Eaton, Woodbury County: The duties of the State Board of Agriculture are many and onerous, and they have been carried on most successfully by the present Officers and Directors. Perhaps the most exacting part of the work is the management of the Iowa State Fair. This fair is one of the best in the country and in most departments, leads all other State Fairs. It has been my good fortune for several years to attend the Annual Meeting of the International Association of Fairs, where I have seen the standing which the officers of the Iowa State Fair have at this meeting, and it makes me proud that I am from Iowa, and proud that I am a constituent of the president of the Iowa State Fair for his advice is sought at this national meeting. When we have a man who has done good work, I believe in keeping him at the job, and therefore I take great pleasure in nominating for President of the State Board of Agriculture, the present incumbent, Mr. C. E. Cameron, of Buena Vista County.

Motion was duly seconded.

Vice President Mullen: Are there any other nominations?

Mr. Barber of Cerro Gordo county moved that the rules be suspended and the secretary be instructed to cast the entire vote of the convention for Mr. C. E. Cameron as President of the State Board of Agriculture for the ensuing year.

Motion was seconded.

The motion was put and carried unanimously. The Secretary announced that he has cast the entire vote for Mr. Cameron to succeed himself, and Mr. Mullen declared him duly elected President of the State Board of Agriculture for the ensuing year.

President Cameron: Gentlemen, I want you to realize that I appreciate your continued confidence, and I want to say that I will do everything possible to make the great Iowa State Fair bigger and better.

President Cameron: The next order of business will be the election of a Vice President for the ensuing year.

H. S. Stanberry, Webster County: Without any great flow of oratory, which I do not possess, and realizing that it requires team work to carry on the great Iowa State Fair, and knowing a good friend of mine from my district in the northwestern part of the state who is doing some good work on this board, I take pleasure in nominating Mr. John P. Mullen, Pocahontas County, for the office of Vice President.

The motion was duly seconded by Mr. Quarton of Kossuth County. There being no other nominations Mr. Stanberry moved that the rules be suspended and the Secretary be instructed to cast the unanimous ballot of the convention for Mr. Mullen for the office of Vice President of the State Board of Agriculture.

Motion was duly seconded and carried and the Secretary cast the vote of the convention for Mr. Mullen and the President declared Mr. Mullen duly elected Vice President of the State Board of Agriculture for the ensuing year.

Vice President Mullen: Gentlemen, from the bottom of my heart I appreciate the continued confidence in my labors. The only way I can repay you is to do the work in the future in such a way as it will meet with your approval. I intend to do my best and co-operate with my colleagues in making the state fair, if possible, greater than ever before. Again I thank you.

President Cameron: The next office to be filled is that of a Director from the Second District.

E. A. Phillips, Jackson County: It seems to be the sense of this meeting that we have a very good Board of Directors and I would like to place in nomination the name of E. T. Davis of Johnson County to succeed himself on the Board as a Director from the Second District.

Mr. V. H. Byrkit seconded the motion. There being no further nominations, Mr. Phillips moved that the rules be suspended and the Secretary be instructed to cast the entire vote for Mr. E. T. Davis.

The motion was seconded and carried and the Secretary cast the vote of the convention for Mr. Davis and the President declared Mr. Davis duly elected to succeed himself as Director of the State Board of Agriculture from the Second District.

President Cameron: Nominations will now be in order for the office of Director from the Fourth District.

M. E. Bacon, Scott County: The gentleman serving as Director from the Fourth District is, I think, known by every fair secretary and horseman in the state of Iowa; and has acquaintances among fair managers and horsemen extending to a great many other states. He has served efficiently as Superintendent of one of the most important departments of the Iowa State Fair, and I take pleasure in nominating Mr. E. J. Curtin of Decorah for the office of Director of the Iowa State Board of Agriculture to represent the Fourth District.

Chas. H. Barber, Cerro Gordo County: I wish to second the nomination of Mr. Curtin.

There being no further nominations Mr. Bacon moved that the rules be suspended and the Secretary be instructed to cast the unanimous vote of the convention for Mr. E. J. Curtin to succeed himself as Director from the Fourth District. The motion was duly seconded and carried. The Secretary cast the vote of the convention and President Cameron declared Mr. Curtin duly elected to succeed himself as Director of the State Board of Agriculture from the Fourth District.

President Cameron: The next office to be filled is that of a Director from the Sixth District.

E. J. Fallor from the Sixth District: I wish to place in nomination Mr. E. H. Maytag of Newton, Iowa. This gives me pleasure because I know Mr. Maytag well and because he is well equipped to fill this position with honor to himself and the Board of Directors. Mr. Maytag at the present time is Secretary-Treasurer of the Maytag Company at Newton, Iowa, one of the largest manufacturing concerns in the state of Iowa. He also owns and manages a farm where he is breeding Holstein cattle which are accredited, and also Poland China hogs. I believe if you will give him your support that he will fill the position with credit.

Chas. H. Barber, Cerro Gordo County: I would like to second the nomination of Mr. Maytag.

J. C. McClune, Mahaska County: I am gratified to have the privilege of nominating one of my fellow citizens for the office of Director of the Agricultural Board of Iowa. We all are willing to admit that Iowa is a great state, we acknowledge that. If you are not convinced of that go visit some of the other states and stay four or five weeks and come back and you will discover you have one of the greatest states in the union, and if you are not satisfied that you have the greatest state fair in the union visit some of the state fairs of some of the other states as I have been doing in the years gone by, and you will become convinced we have a great state fair in Iowa, and one of the greatest in the United States. Now there is a reason for these things, there is a reason for the great state fair, and it has been in the management of that fair. I am personally acquainted with the retiring member from the Sixth District. I have known him for more than twenty-five years. We were proud of him when he was on the State Fair Board. He is not a candidate to succeed himself I am informed, but the people of my district desire me on this occasion to nominate a man who will fill his shoes on the State Board of Agriculture. I am convinced that on the State Board of Agriculture, as in other business, that there are three main elements in every man. I might incorporate them all in brains, but I will say he must be intelligent, he must be honest and he must be courageous. The man whom I desire to nominate today has all of these attributes. I have known him from boyhood up. I knew him when traveling between the handles of a plow. I knew him when he was a successful farmer for himself. I knew him when he was one of the best salesmen of that country. I knew him when he organized a little country bank and made a success of that and I knew him when he organized a larger bank in the city of Oskaloosa, and made a success of that. I know him now as Vice President of the largest banking institution in Mahaska County. I know him as Treasurer of the great Southern Iowa Fair of which most of you have heard. I know he is a dependable and honest man, a conscientious man, and on this State Board of Agriculture will be one of the strongest, most virile fighting forces you could put on. I take great pleasure today in nominating for this particular office, important as I think it is, my fellow townsman, Mr. C. Ed Beman of Mahaska County.

Mr. Legoe, Keokuk County: Mr. President and Gentlemen of the Convention: I have not taken the opportunity of asking you to let me make speeches here and this probably will be the last one I will ever undertake, but I realize that there are four great natural conditions that have got to exist in order to have a good fair. The first of them is a productive country. We have that. The second is the co-operation of the people. We have that. The third is the weather. We don't always have that, but sometimes we do. And the fourth is the Board of Managers and we generally have that, barring myself, perhaps. I have been a director in this fair when there was not a permanent building on the fair grounds, from that time on to the great exposition grounds that you have. I have seen the campers come to the fair in covered wagons by the hundreds, and by the thousands. I have seen automobiles exhibited there as curiosities, and I have seen them come in countless thousands since that time. Now then I want to say this in reference to proper managers, that I have known Mr. Beman here ever since he was a small boy. He is a gentleman of great energy. He is honest, he is upright, he has made a great and useful citizen in the state of Iowa, and during war time he was one of the best men in the state to finance the government in that hour of our misfortunes and perils. He is one of the organizers and builders up of the great Southern Iowa Exposition at Oskaloosa, and he is a man of untiring energy, and if he is elected on this board I will guarantee for him he will give you his best energy in anything he undertakes, and he will perform it if it is within human ability to do so. And I take great pleasure in seconding his nomination and would ask my friends to support Mr. Beman because I know what he is, and I know what he will do if you place him on this board. I thank you.

President Cameron: If there are no further nominations I will appoint Mr. E. W. Williams, Delaware County; Mr. Chas. H. Barber of Cerro Gordo County; Mr. F. A. Gatch of Adair County, and Mr. E. A. Phillips of Jackson County as tellers.

Gentlemen, you will prepare your ballots and as the name of the delegate is called by the Secretary, you will deposit your ballot with one of the tellers.

The tellers reported the result of the ballot as follows: C. Ed Beman, 79 votes; and E. H. Maytag, 40 votes.

President Cameron: Mr. C. Ed Beman having received a majority of all votes cast, I declare him duly elected as a Director of the State Board of Agriculture for the ensuing two years.

President Cameron: The next order of business will be the election of a Director from the Eighth District.

F. E. Sheldon, Ringgold County: I wish to place in nomination the name of Mr. J. C. Beckner of Page County to succeed himself as a member of the State Board of Agriculture from the Eighth District.

B. W. Williams, Delaware County: I wish to second the nomination of Mr. J. C. Beckner.

There being no further nominations, Mr. Sheldon moved that the rules be suspended and that the Secretary be instructed to cast the entire vote of the convention for Mr. Beckner of Page County to succeed himself. The motion was seconded by Mr. Williams and carried. The Secretary announced that he had cast the entire vote of the convention for Mr. Beckner and the President declared Mr. Beckner duly elected to succeed himself as a Director on the State Board of Agriculture from the Eighth District.

President Cameron: The next is the election of a Director from the Tenth District.

R. J. Johnston, Humboldt County: I want to say just a word for the State Board of Agriculture. In the last fifty years there has not been over three or four years that I have not attended the Iowa State Fair, and I have known all of the Officers and Directors during this period. They have constituted the State Board of Agriculture. I want to say to you that it is the pride of my life that there never has been elected on this Board a man that has had one stain on his character or reputation. I was rather sorry to see my friend T. C. Legoe not elected again, but I want to offer a little advice to Mr. Legoe. It has been about twenty-six years since I served on this Board. I was the first President when it was made the State Department of Agriculture, and what I want to say is that I take my good wife every year and go to the state fair and I want Mr. Legoe to do the same. We have a man in the Tenth District who is a member of this Board and who comes up to all of these specifications, and I now take great pleasure in nominating Mr. Sears McHenry of Crawford County.

C. P. Harvey, Crawford County: I rise to second the nomination of Mr. McHenry of Crawford County.

There being no further nominations, Mr. Johnston moved that the rules be suspended and the Secretary be instructed to cast the entire vote of this convention for Mr. McHenry to succeed himself as a member of the State Board of Agriculture from the Tenth District.

Motion was seconded by Mr. Harvey and the Secretary announced that he had so cast the vote of the convention for Mr. McHenry and the President declared Mr. McHenry duly elected to succeed himself as a member of the State Board of Agriculture from the Tenth District for a term of two years.

Mr. McHenry, Crawford County: I am grateful to my friend from Crawford County, as I am to all of my friends here in the convention. I can assure you that it has been a great pleasure for me to serve with the splendid men who have constituted the State Board of Agriculture for the last few years. It is a pleasure and honor to work with them. I have given my best endeavor and I assure you that it will be my pleasure to continue to do the best I can. I thank you.

President Cameron: This completes the election of officers and directors of the State Board of Agriculture, and so far as I am advised, the business of the convention.

Chas. H. Barber, Cerro Gordo County, moved that the convention adjourn. Motion was duly seconded and carried.

President Cameron: The convention will stand adjourned.

PART IV

Awards of the 1922 Iowa State Fair and Exposition

HORSE DEPARTMENT

SUPERINTENDENT........................C. F. CURTISS, Ames, Iowa.

PERCHERONS

EXHIBITORS—Albert C. Adix, Ogden; L. C. Altemeier, Newton; M. C. Ames, Bros. & Sons, Mason City; M. C. Bitterman & Sons, Nora Springs; Fred L. Bitterman, Nora Springs; Cavitt and Lang, Mt. Sterling; A. F. Champlin, Ames; W. J. Dawson & Sons, Washta; Ward Dyer, Pleasantville; J. G. Hammer, Ames; E. P. Hamilton & Sons, Garden Grove; R. W. Hoit & Son, Beacon, R. R. No. 1; E. L. Humbert & Son, Corning; Holmes Bros., Milton; Iowa State College, Ames; W. L. Joy, Grand Junction; Frank Keenan & Son, Shenandoah; J. M. Kuhn, Ames; Lee Bros., Mitchellville; J. B. McMillan, Rock Rapids; A. Rock Meints, Dixon; M. J. Nelson, Cambridge; J. C. Redman, Altoona; Rookwood Farm, Ames; W. W. Seeley, Stuart; Tom Skola, Slater; A. J. Stonebarger, Lone Tree; J. O. Singmaster & Son, Keota; Truman's Pioneer Stud Farm, Bushnell, Ill.; K. A. Wilson, Norfolk.

JUDGE............................WM. CROWNOVER, Hudson, Iowa.

Stallion Five Years Old and Over ($50, $40, $30, $20, $10)—First, Ames Bros. & Sons on Irida 131693; second, J. O. Singmaster & Son on Maple Grove Thomas 132542; third, Ernest L. Humbert & Son on Triumph 149699; fourth, Truman's Pioneer Stud Farm on Reboutex 132832; fifth, J. O. Singmaster & Son on Maple Grove Trojan 138951.

Stallion Four Years Old and Under Five ($50, $40, $30, $20, $10)—First, J. O. Singmaster & Son on Maple Grove Coco 153092; second, A. L. Champlin on Ames Kronpring 154049; third, Ernest L. Humbert & Son on Guy Olbert 151509; fourth, Truman's Pioneer Stud Farm on Moniteur 154008; fifth, Ernest L. Humbert & Son on Seigle 151820.

Stallion Three Years Old and Under Four ($50, $40, $30, $20, $10)—First, J. O. Singmaster & Son on Fairholme Lagota Jalap 157209; second, J. O. Singmaster & Son on Maple Grove Knapp 158618; third, Truman's Pioneer Stud Farm on Jascenter 159393; fourth, Ernest L. Humbert & Son on Olbertan 159385; fifth, Frank Keenan & Son on Sans Pariel Jalon 156076.

Stallion Two Years Old and Under Three ($50, $40, $30, $20, $10)—First, J. G. Hanmer on Ames Jalap 172243; second, J. O. Singmaster & Son on Maple Grove Harry 165752; third, Frank Keenan & Son on Jalo 165100; fourth, J. O. Singmaster & Son on Maple Grove Abe 165757; fifth, L. C. Altemier on Maltais Wayne 166954.

NATIONAL PERCHERON BREEDERS' FUTURITY

Stallions ($70, $60, $50, $45, $40, $35, $30, $25, $20, $18, $15, $12)—First, J. O. Singmaster & Son on Maple Grove Wonder 170861; second, J. C. Redman on Harvester; third, R. W. Hoit & Son on Selim; fourth, Holmes Bros., on Tulip; fifth, J. C. Redman on Lollard; sixth, E. P. Hamilton & Sons on Pompey's Bruno; seventh, Holmes Bros., on Tulin; eighth, A. J. Stonebarger on Superior; ninth, Lee Bros. on Leaside Lagnon; tenth, W. W. Seeley on Brilliant F.; eleventh, M. C. Bitterman & Sons on Ikey Boy; twelfth, M. C. Bitterman & Sons on Isaie Aurore.

Stallion Foal ($50, $40, $30, $20, $10)—First, Holmes Bros., on Toulon II; second, Lee Bros., on La Vernon; third, Ames Bros. & Sons on Irida's Boy Wonder; fourth, M. C. Bitterman & Sons on Isaie Bud; fifth, L. C. Altemeier on Maltas Claras.

Mare Five Years Old and Over ($50, $40, $30, $20, $10)—First, J. O. Singmaster & Son on Smith Creek May 138775; second, Ames Bros. & Sons on Queen Mallais 138544; third, Ames Bros. & Sons on Diamond 2d 146839; fourth, Frank Keenan & Son on Keota Lassie 133143; fifth, Ernest L. Humbert & Son on Surprise 83742.

Mare Four Years Old and Under Five ($50, $40, $30, $20, $10)—First, Ernest L. Humbert & Son on Pearl 150675; second, Ames Bros. & Sons on Lady Jalap 152897; third, R. W. Hoit & Son on Juno 146584; fourth, Albert C. Adix on Morie 153807; fifth, R. W. Hoit & Son on Sadie 150626.

Mare Three Years Old and Under Four ($50, $40, $30, $20, $10)—First, J. C. Redman on Heritage 161214; second, R. W. Hoit & Son on Marments 156326; third, J. O. Singmaster & Son on Maple Grove Ivy 158912; fourth, M. C. Bitterman & Sons on Frances Jr. 154847; fifth, E. L. Humbert & Son on Weldon Clair 156683.

Mare Two Years Old and Under Three $50, $40, $30, $20, $10)—First, J. O. Singmaster & Son on Maple Grove Cartelina 165753; second, J. O. Singmaster & Son on Maple Grove Daisy 165749; third, A. J. Stonebarger & Son on Beauty 165892; fourth, E. P. Hamilton & Sons on Maxine 166708; fifth, R. W. Hoit & Sons on Grace 167352.

NATIONAL PERCHERON BREEDERS' FUTURITY

Filly ($70, $60, $50, $45, $40, $35, $30, $25, $20, $18, $15, $12)—First, J. O. Singmaster & Son on Maple Grove Sunrise 170855; second, R. W. Hoit & Son on Roselta; third, Fred L. Bitterman on Black Beauty; fourth, Jesse M. Kuhn on Adelaide; fifth, Lee Bros. on Lamaxine; sixth, Iowa State College on Thelma; seventh, E. L. Humbert & Son on Mable Olbert; eighth, A. J. Stonebarger on Mable; ninth, Ames Bros. & Sons on Ethel L.; tenth, E. P. Hamilton & Sons on Junella 167288; eleventh, E. L. Humbert & Son on Merigold; twelfth, W. J. Dawson & Sons on Queen.

Mare Foal $50, $40, $30, $20, $10)—First, Rookwood Farm on Rookwood Juliet; second, Holmes Bros. on Myrtle; third, Ernest L. Humbert & Son on Gwendoline 172473; fourth, Lee Bros. on La Verna; fifth, Ames Bros. & Sons on Lady Japalac.

Junior Champion Stallion ($25, Reserve Ribbon)—Champion, J. O. Singmaster & Sons on Maple Grove Wonder; reserve, J. G. Hanmer on Ames Jalap.

Senior Champion Stallion ($25, Reserve Ribbon)—Champion, J. O. Singmaster & Son on Maple Grove Coco; reserve, A. L. Champlin on Ames Kronpring.

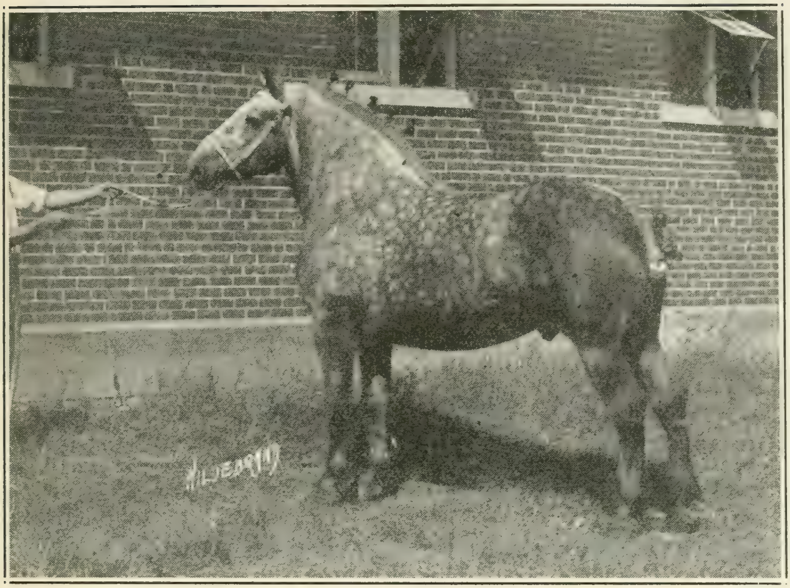
Grand Champion Stallion ($50, Reserve Ribbon)—Champion, J. O. Singmaster & Son on Maple Grove Coco; reserve, J. O. Singmaster & Son on Maple Grove Wonder.

Junior Champion Mare ($25, Reserve Ribbon)—Champion, J. O. Singmaster & Son on Maple Grove Cartelina; reserve, Rookwood Farm on Rookwood Juliet.

Senior Champion Mare ($25, Reserve Ribbon)—Champion, J. O. Singmaster & Son on Smith Creek May; reserve, E. L. Humbert & Son on Pearl.

Grand Champion Mare ($50, Reserve Ribbon)—Champion, J. O. Singmaster & Son on Maple Grove Cartelina; reserve, J. O. Singmaster & Son on Smith Creek May.

Champion Stallion Owned in Iowa ($25, Reserve Ribbon)—Champion, J. O. Singmaster & Son on Maple Grove Coco; reserve, J. O. Singmaster & Son on Maple Grove Wonder.



MAPLE GROVE COCO

Grand Champion Percheron Stallion. Singmaster & Son, Keota, Iowa.

Champion Mare Owned in Iowa ($25, Reserve Ribbon)—Champion, J. O. Singmaster & Son on Maple Grove Cartelina; reserve, J. O. Singmaster & Son on Smith Creek May.

Get of Sire, Three Animals, Either Sex ($40, $30, $20, $15, $10)—First. J. O. Singmaster & Son; second, R. W. Hoit & Son; third, J. G. Hanmer; fourth, L. C. Altemeier; fifth, E. P. Hamilton & Sons.

Produce of Mare, Two Animals, Either Sex ($40, $30, $20, $15, $10)—First, J. O. Singmaster & Son; second, Ames Bros. & Sons; third, L. C. Altemeier; fourth, E. P. Hamilton & Sons; fifth, Ernest L. Humbert & Son.

Stallion and Three Mares Under Three, Bred by Exhibitor ($40, $30, $20, $15, $10)—First, J. O. Singmaster & Son; second, R. W. Hoit & Son; third, E. P. Hamilton & Sons; fourth, W. J. Dawson & Sons; fifth, M. C. Bitterman & Sons.

Stallion and Three Mares, Any Age ($40, $30, $20, $15, $10)—First, J. O. Singmaster & Son; second, Ames Bros. & Sons; third, Ernest L. Humbert & Son; fourth, R. W. Hoit & Son; fifth, E. P. Hamilton & Sons.

Five Stallions (Ribbon)—First, J. O. Singmaster & Son.

Premier Breeders' Prize (to the breeder of animal winning the largest amount in prizes in the Percheron classes; Special Premier Breeders' Champion Ribbon or Banner)—J. O. Singmaster & Son.

Exhibitor's Prize (to the exhibitor of animals winning the largest amount in prizes in the Percheron classes; Special Premier Breeder's Champion Ribbon or Banner)—J. O. Singmaster & Son.

BELGIANS

Exhibitors—J. Aug. Carlson, Ogden; H. J. Claussen, Ogden; Wm. Claussen, Davenport; W. B. Donelson, Ogden; Albert Doerder, Boone; C. G. Good, Ogden; H. Graban, Boone; Iowa State College, Ames; Chas. Irvine, Ankeny;

J. W. Kerr, Mt. Sterling; A. L. Lansing, Perry; G. E. Muench, Ogden; Simon Peterson, Ogden; J. C. Ritchie, Stratford; Leonard M. Williams, Redfield, Box 167; K. A. Wilson, Norwalk.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Stallion Five Years Old and Over ($50)—First, Wm. Claussen on Jupiter 8936.

Stallion Four Years Old and Under Five ($50, $40)—First, Albert Doerder on Jumbo 12339; second, Chas. Irvine on Al De Bree 11696.

Stallion Three Years Old and Under Four ($50, $40, $30, $20, $10)—First, C. G. Good on Echodale Farceur 12123; second, Chas. Irvine on King 12295; third, Chas. Irvine on Irvinedale Pride 11998; fourth, W. B. Donelson on Farceurs Hero 12023; fifth, Chas. Irvine on Mike Jr. 11667.

Stallion Two Years Old and Under Three ($50, $40, $30, $20)—First, Simon Peterson on Farceurs King 12477; second, Chas. Irvine on Irvinedale Hi 12489; third, Aug. J. Carlson on Belmont Farceur 12579; fourth, Albert Doerder on Tonie 12644.

NATIONAL DRAFT HORSE BREEDERS' FUTURITY

Stallions ($50, $40, $35, $25, $20, $15, $15, $10, $10)—First, Chas. Irvine on Irvinedale King; second, G. E. Muench on Farceur's Successor; third, W. B. Donelson on Farceur's Crown; fourth, C. G. Good & Son on Farceur's Magnet; fifth, Iowa State College on Belmont; sixth, Leonard Williams on Irvinedale Jupiter 12812; seventh, C. G. Good & Son on Farceur's Cadet; eighth, G. E. Muench on Farceur de Lemon; ninth, J. W. Kerr on Pat Farceur.

Stallion Foal ($40, $30, $20, $10, $10)—First, Chas. Irvine on Irvinedale Alfred; second, A. L. Lansing on Ideal Distrait; third, J. W. Kerr on Prince Farceur; fourth, H. B. Graban; fifth, Aug. J. Carlson on Belmont Jupiter 3217.

Mare Five Years Old and Over ($40, $30, $20, $10, $10)—First, C. G. Good on Paramount Lulu 6014; second, Chas. Irvine on Irvinedale Rica 5294; third, Aug. J. Carlson on Lavonne De Rossa 3217; fourth, C. G. Good on Civette 3065; fifth, J. W. Kerr on Bessie.

Mare Four Years Old and Under Five ($40, $30, $20, $10, $10)—First, H. G. Graban on Grace 7349; second, J. W. Kerr on June 6708; third, H. J. Claussen on Cartel du Escadron 7469; fourth, Chas. Irvine on Diane 7551; fifth, Albert Doerder on Lela 6905.

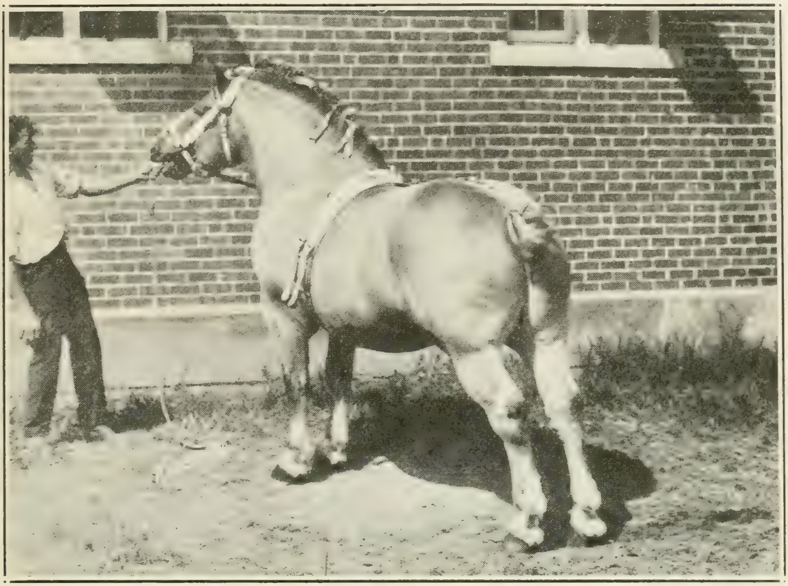
Mare Three Years Old and Under Four ($40, $30, $20, $10, $10)—First, C. G. Good on Farcetta 8185; second, C. G. Good on Farceuretta 8186; third, Albert Doerder on Lavonne 8335; fourth, A. L. Lansing on Flora Du Fosteau 8301; fifth, J. W. Kerr on Bee 8452.

Mare Two Years Old and Under Three ($40, $30, $20, $10, $10)—First, G. E. Muench on Queen Farceur 8841; second, J. A. Carlson on Belmont Minnie 9060; third, Chas. Irvine on Irvinedale Ricette 8869; fourth, Chas. Irvine on Springvale Letna 8898; fifth, Wm. Claussen on Mississippi Pearl, 8836.

NATIONAL DRAFT HORSE BREEDERS' FUTURITY

Filly ($50, $40, $35, $25, $20, $15, $15, $10, $10)—First, J. Aug. Carlson on Belmont Lozette; second, C. G. Good & Son on Farette; third, G. E. Muench; fourth, Chas. Irvine on Irvinedale Zetta; fifth, H. J. Claussen on Golda Farceur; sixth, Albert Doerder on Alvina; seventh, C. G. Good & Son on Farletta; eighth, Chas. Irvine on Irvinedale Onida; ninth, G. E. Muench on Farce May.

Mare Foal ($40, $30, $20, $10, $10)—First, H. J. Claussen on Bonnie De Farceur; second, C. G. Good & Son; third, C. G. Good & Son; fourth, J. W. Kerr on Ina; fifth, Chas. Irvine on Irvinedale Civette.



ECHODALE FARCEUR

Grand Champion Belgian Stallion. C. G. Good & Son, Ogden, Iowa.

Junior Champion Stallion ($25, Reserve Ribbon)—Champion, Simon Peterson on Farceurs King 12477; reserve, Chas. Irvine on Irvinedale King.

Senior Champion Stallion ($25, Reserve Ribbon)—Champion, C. G. Good on Echodale Farceur 12123; reserve, Albert Doerder on Jumbo 12339.

Grand Champion Stallion ($50, Reserve Ribbon)—Champion, C. G. Good on Echodale Farceur 12123; reserve, Simon Peterson on Farceurs King.

Junior Champion Mare ($25, Reserve Ribbon)—Champion, G. E. Muench on Queen Farceur 8841; reserve, J. Aug. Carlson on Belmont Lovette.

Senior Champion Mare ($25, Reserve Ribbon)—Champion, C. G. Good on Farcetta 8185; reserve, C. G. Good on Paramount Lulu 6014.

Grand Champion Mare ($50, Reserve Ribbon)—Champion, G. E. Muench on Queen Farceur 8841; reserve, C. G. Good on Farcetta 8185.

Champion Stallion Owned in Iowa ($25, Reserve Ribbon)—Champion, C. G. Good on Echodale Farceur 12123; reserve, Simon Peterson on Farceur's King 12477.

Champion Mare Owned in Iowa ($25, Reserve Ribbon)—Champion, G. E. Muench on Queen Farceur 8841; reserve, C. G. Good on Farcetta 8185.

Get of Sire, Three Animals, Either Sex ($40, $30, $20, $15, $10)—First, C. G. Good & Son; second, G. E. Muench; third, C. G. Good & Son; fourth, Chas. Irvine; fifth, H. J. Claussen.

Produce of Mare, Two Animals, Either Sex ($40, $30, $20, $15, $10)—First, C. G. Good; second, C. G. Good; third, G. E. Muench; fourth, C. G. Good; fifth, Chas. Irvine.

Grand Stallion (stallion and three mares, under three, bred by exhibitor; $40, $30, $20)—First, Chas. Irvine; second, C. G. Good; third, Wm. Claussen.

Stallion and Three Mares, Any Age ($40, $30, $20, $15, $10)—First, C. G. Good; second, Chas. Irvine; third, G. E. Muench; fourth, Albert Doerder; fifth, J. W. Kerr.

Five Stallions (Ribbon)—First, Chas. Irvine.

BREEDERS' PRIZES

Premier Breeder's Prizes (to the breeder of animals winning the largest amount in prizes in the Belgian classes; Special Premier Breeder's Champion Ribbon or Banner)—Chas. Irvine.

Exhibitor's Prize (to the exhibitor of animals winning the largest amount in prizes in the Belgian classes; Special Premier Exhibitor's Champion Ribbon or Banner)—C. G. Good & Son.

ENGLISH SHIRES

EXHIBITORS—V. Mildred Cooke, Webster City; Ward Dyer, Pleasantville; E. P. Hamilton & Sons, Garden Grove; J. L. Howard, Ankeny; F. A. Huddlestun, Webster City; Tom Skola, Slater; M. H. Smiley, Dallas Center; Smith Bros., Route 5, Des Moines; Truman's Pioneer Stud Farm, Bushnell, Ill.; H. Vann & Son, Overbrook, Kans.; C. L. Waltz, Creston.

JUDGE............................THOMAS R. HOLBERT, Greeley, Iowa.

Stallion Five Years Old and Over ($50, $40, $30)—First, Truman's Pioneer Stud Farm on Milestone Quadrant 19013; second, Truman's Pioneer Stud Farm on Morbury Bohemian 19011; third, E. P. Hamilton & Sons on Daniel Vulcan 16704.

Stallion Four Years Old and Under Five ($50)—First, Ward Dyer on Royal Charm 18462.

Stallion Three Years Old and Under Four ($50, $40, $30, $20)—First, F. A. Huddlestun on British Flagg II 18663; second, Tom Skola on Tatton King 18772; third, Truman's Pioneer Stud Farm on Royal Tipton 18798; fourth, H. Vann & Son on Royal Wrydelands Friar 18824.

Stallion Two Years Old and Under Three ($50, $40, $30, $20)—First, F. A. Huddleston on Tatton Dray King II 19111; second, Truman's Pioneer Stud Farm on Klockinge Sailor Emmanuel 19082; third, M. H. Smiley on Queen's Royal Grey 18999; fourth, C. L. Waltz on Harlston 19167.

NATIONAL SHIRE BREEDERS' FUTURITY

Stallion ($50, $40, $35, $25)—First, Smith Bros. on American Model; second, J. L. Howard on Bold Conqueror; third, C. L. Waltz on Blucher; fourth, C. L. Waltz on Creston Archy.

Stallion Foal ($40, $30, $20)—First, Smith Bros. on Bold Prince; second, Smith Bros. on Feathermore; third, H. Vann & Son on Wrydelands Recruit.

Mare Five Years Old and Over ($40, $30, $20, $15)—First, F. A. Huddlestun on Zelda May 13258; second, F. A. Huddlestun on Moulton Mae 17775; third, J. L. Howard on Favorite Duchess 14273; fourth, F. A. Huddlestun on Mathel 17186.

Mare Four Years Old and Under Five ($40)—First, Smith Bros. on Mercedes 18493.

Mare Three Years Old and Under Four ($40, $30, $20, $15)—First, Truman's Pioneer Stud Farm on Come Again 18920; second, Truman's Pioneer Stud Farm on Heatherbloom 18921; third, F. A. Huddlestun on Edgewood Luceil 18662; fourth, F. A. Huddlestun on Edgewood Sunset 18659.

Mare Two Years Old and Under Three ($40, $30, $20, $15)—First, Truman's Pioneer Stud Farm on Westbrook Diamond 18959; second, J. L. Howard on Severn's Easter Eve 19019; third, J. L. Howard on Royal Belle Eve 19076; fourth, H. Vann & Son on Betsey.

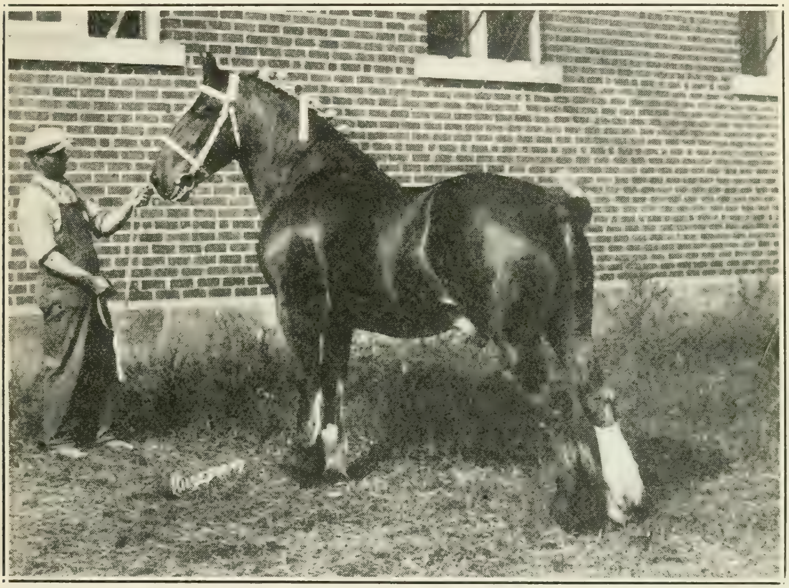
NATIONAL SHIRE BREEDERS' FUTURITY

Filly ($50, $40, $35, $25, $20)—First, Smith Bros. on Miss Sunshine; second, V. Mildred Cooke on V. Erste Flag; third, F. A. Huddlestun on Mary Belle B.; fourth, Smith Bros. on Rolled Stockings; fifth, E. P. Hamilton & Sons on Florence Funk 19396.

Mare Foal ($40, $30, $20, $15)—First, F. A. Huddlestun on Mildred C.; second, V. Mildred Cooke on V. Marigold Flag; third, J. L. Howard; fourth, H. Vann & Son on White Hall Lady.

Junior Champion Stallion ($25, Reserve Ribbon)—Champion, F. A. Huddlestun on Tatton Dray King 19111; reserve, Smith Bros. on American Model.

Senior Champion Stallion ($25, Reserve Ribbon)—Champion, Truman's Pioneer Stud Farm on Miles Stone Quadrant 19013; reserve, F. A. Huddlestun on British Flag 18663.



TATTON DRAY KING

Grand Champion Shire Stallion. F. A. Huddleston, Webster City, Iowa.

Grand Champion Stallion ($25, Reserve Ribbon)—Champion, F. A. Huddleston on Tatton Dray King 19111; reserve, Truman's Pioneer Stud Farm on Milestone Quadrant 19013.

Junior Champion Mare ($25, Reserve Ribbon)—Champion, Truman's Pioneer Stud Farm on Westbrook Diamond; reserve, Smith Bros. on Miss Sunshine.

Senior Champion Mare ($25, Reserve Ribbon)—Champion, Truman's Pioneer Stud Farm on Come Again; reserve, F. A. Huddlestun on Zelda May.

Grand Champion Mare ($25, Reserve Ribbon)—Champion, Truman's Pioneer Stud Farm on Westbrook Diamond; reserve, Truman's Pioneer Stud Farm on Come Again.

Champion Stallion Owned in Iowa ($25, Reserve Ribbon)—Champion, F. A. Huddlestun on Tatton Dray King 19111; reserve, Smith Bros. on American Model.

Champion Mare Owned in Iowa ($25, Reserve Ribbon)—Champion, F. A. Huddlestun on Zelda May; reserve, Smith Bros. on Miss Sunshine.

Get of Sire, Three Animals, Either Sex ($40, $30, $20, $15—First, Smith Bros.; second, F. A. Huddlestun; third, F. A. Huddlestun; fourth, H. Vann & Son.

Produce of Mare, Two Animals, Either Sex ($40, $30, $20, $15)—First, Smith Bros.; second, F. A. Huddlestun; third, F. A. Huddlestun; fourth, J. L. Howard.

Stallion and Three Mares Under Three, Bred by Exhibitor ($40, $30, $20) —First, Smith Bros.; second, F. A. Huddlestun; third, H. Vann & Son.

Stallion and Three Mares, Any Age ($40, $30, $20, $15)—First, Truman's Pioneer Stud Farm; second, F. A. Huddlestun; third, Smith Bros.; fourth, H. Vann & Son.

Five Stallions (Ribbon)—Truman's Stud Farm.

Premier Breeder's Prize (to breeder of animals winning the largest amount in prizes in the Shire classes; Special Breeder's Champion Ribbon or Banner)—Smith Bros.

Exhibitor's Prize (to exhibitor of animals winning the largest amount in prizes in the Shire classes; Special Premier Exhibitor's Ribbon or Banner)—F. A. Huddlestun.

SPECIAL PRIZES

Offered by the Shire Horse Society of Great Britain.

Best Shire Stallion or Colt (Silver Medal)—F. A. Huddlestun on Tatton Dray King.

Best Shire Mare or Filly (Silver Medal)—Truman's Pioneer Stud Farm on Westbrook Diamond.

Champion Shire Stallion, Any Age (Silver Trophy)—F. A. Huddlestun on Tatton Dray King.

Champion Shire Mare, Any Age (Silver Trophy)—Truman's Pioneer Stud Farm on Westbrook Diamond.

SPECIAL PRIZES

Offered by the Shire Horse Society of Great Britain and the American Shire Horse Association.

Grade Mares or Geldings Sired by Registered Shire Horses ($100, $75, $50, $40, $30)—First, Truman's Pioneer Stud Farm on Hobson; second, Truman's Pioneer Stud Farm on Lockinge; third, Truman's Pioneer Stud Farm on Jack; fourth, Truman's Pioneer Stud Farm on Jim; fifth, Geo. F. Huston, Waukee, on Flora.

Grade Shire Team in Harness ($100)—Truman's Pioneer Stud Farm on Hobson and Lockinge.

CLYDESDALES

EXHIBITORS—F. L. Anderson, Ross, Iowa; Iowa State College, Ames; G. W. Merna, Wyoming; J. G. Sage & Sons, Gilman; B. C. Stringham, Dexter.

JUDGE..............................ANDREW McFARLANE, Palo, Iowa.

Stallion Five Years Old and Over ($50)—First, G. W. Merna on Proud Archer 20041.

Stallion Four Years Old and Under Five ($50)—First, Iowa State College on Peers Stamp 21254.

Stallion Three Years Old and Under Four ($50)—First, J. G. Sage & Son on Charming Archer 21247.

NATIONAL BREEDERS' FUTURITY

Stallion ($50, $40, $35, $25)—First, G. W. Merna on Archers Orphan; second, Iowa State College on Criterions Last; third, F. L. Anderson on Lofty Peer; fourth, J. G. Sage & Sons on Farmer Boy.

Stallion Foal ($40, $30)—First, B. C. Stringham on Three Star; second, J. G. Sage & Son on Sulton Peer.

Mare Five Years Old and Over ($40, $30, $20)—First, F. L. Anderson on Cedric Baroness 20649; second, G. W. Merna on Samudas Violet 17936; third, B. C. Stringham on Queen 22226.

Mare Four Years Old and Under Five ($40)—J. G. Sage & Son on Hildred Chief 20446.

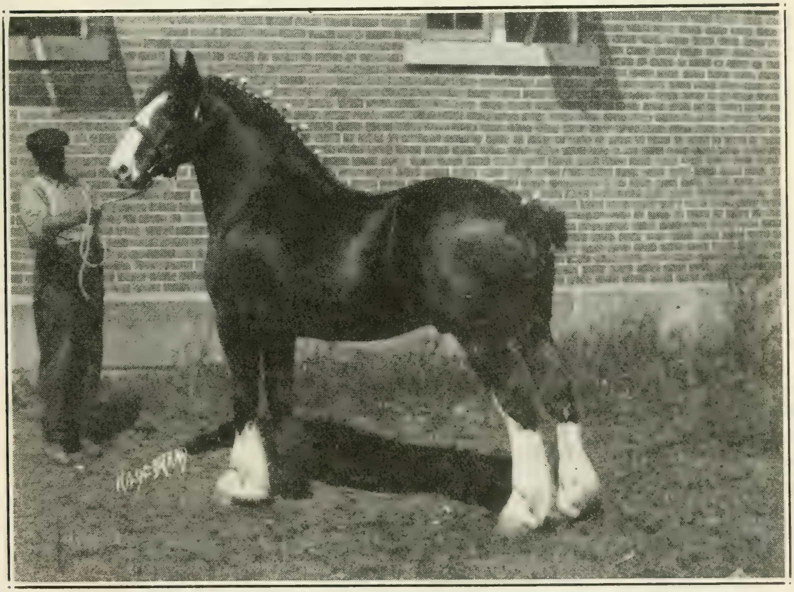
Mare Three Years Old and Under Four ($40, $30, $20, $15)—First, G. W. Merna on Lady Archer 21334; second, J. G. Sage & Son on Cambridge Rose 21442; third, J. G. Sage & Son on Lou Dillion II 21450; fourth, J. G. Sage & Son on Dorothy Peer 21502.

Mare Two Years Old and Under Three ($40, $30, $20, $15)—First, G. W. Merna on Hayfield Diamond 21760; second, G. W. Merna on Archers Maid 21717; third, J. G. Sage & Son on Thedá Peer 21968; fourth, J. G. Sage & Son on Maggie Topaz 21870.

NATIONAL BREEDERS' FUTURITY

Filly ($50, $40, $35, $25, $20, $10)—First, Iowa State College on College Queen; second, Iowa State College on College Beauty 22013; third, Iowa State College on Criterions Lady; fourth, J. G. Sage & Sons on Freda Peer; fifth, G. W. Merna on Archers Bud; sixth, F. L. Anderson on Dorothy's Queen.

Mare Foal ($40, $30, $20)—First, F. L. Anderson on Mare Foal; second, G. W. Merna on Lassie; third, J. G. Sage & Sons on May Archer.



PROUD ARCHER

Grand Champion Clydesdale Stallion. G. W. Merna, Wyoming, Ill.

Junior Champion Stallion ($25, Reserve Ribbon)—Champion, G. W. Merna on Archer's Orphan; reserve, B. C. Stringham on Three Star.

Senior Champion Stallion ($25, Reserve Ribbon)—Champion, G. W. Merna on Proud Archer; reserve, J. G. Sage & Sons on Charming Archer.

Grand Champion Stallion ($25, Reserve Ribbon)—Champion, G. W. Merna on Proud Archer; reserve, J. G. Sage & Sons on Charming Archer.

Junior Champion Mare ($25, Reserve Ribbon)—Champion, G. W. Merna on Hayfield Diamond; reserve, Iowa State College on College Queen.

Senior Champion Mare ($25, Reserve Ribbon)—Champion, F. W. Anderson on Cedric Baroness; reserve, G. W. Merna on Lady Archer.

Grand Champion Mare ($25, Reserve Ribbon)—Champion, F. L. Anderson on Cedric Baroness; reserve, G. W. Merna on Lady Archer.

Champion Stallion Owned in Iowa ($25, Reserve Ribbon)—Champion, J. G. Sage & Son on Charming Archer; reserve, B. C. Stringham on Three Star.

Champion Mare Owned in Iowa ($25, Reserve Ribbon)—Champion, F. L. Anderson on Cedric Baroness; reserve, Iowa State College on College Queen.

Get of Sire, Three Animals, Either Sex ($40, $30, $20, $15)—First, J. G. Sage & Sons; second, G. W. Merna; third, Iowa State College; fourth, J. G. Sage & Sons.

Produce of Mare, Two Animals, Either Sex ($40, $30, $20, $15)—First, G. W. Merna; second, G. W. Merna; third, J. G. Sage & Sons; fourth, F. L. Anderson.

Grand Display (stallion and three mares under three bred by exhibitor; $40, $30)—First, Iowa State College; second, G. W. Merna.

Stallion and Three Mares, Any Age ($40, $30, $20, $15)—First, G. W. Merna; second, F. L. Anderson; third, J. G. Sage & Sons; fourth, G. W. Merna.

Premier Breeder's Prize (to breeder winning the largest amount in prizes in the Clydesdale classes; Special Premier Breeder's Champion Ribbon or Banner)—H. H. Ford, Storm Lake.

Exhibitor's Prize (to exhibitors of animals winning the largest amount in prizes in the Clydesdale classes; Special Premier Exhibitor's Champion Ribbon or Banner)—G. W. Merna.

DRAFT GELDINGS AND MARES

EXHIBITORS—M. C. Bitterman & Sons, Nora Springs; Wm. Claussen, Davenport; W. J. Dawson & Sons, Washta; E. C. Eaton, Humeston; Holmes Bros., Milton; Geo. F. Huston, Waukee; Chas. Irvine, Ankeny; J. W. Kerr, Mt. Sterling; John Logan, care Wortham Shows, Detroit, Mich.; M. C. Peters Mill Co., Omaha, Nebr.; J. C. Ritchie, Stratford; Swift & Company, Chicago, Ill.; A. J. Stonebarger, Lone Tree.

JUDGE..........................W. J. KENNEDY, Sioux City, Iowa.

Gelding or Mare Four Years Old or Over ($50, $40, $30, $20)—First, Albert Doerder on Phelix; second, Holmes Bros. on Vesta; third, Geo. F. Huston on Flora; fourth, A. J. Stonebarger & Son on Jim.

Gelding or Mare Two Years and Under Three ($50)—First, Geo. F. Huston on Black Topsy.

Gelding or Mare One Year and Under Two ($50, $40)—First, Geo. F. Huston on Jerry; second, W. J. Dawson & Son on Dick.

Horse or Filly Foal ($50, $40, $30)—First, Holmes Bros. on Tuffy; second, E. C. Eaton on Mutt; third, E. C. Eaton on Jeff.

Farmer's Team ($50, $40, $30, $20)—First, F. A. Huddlestun; second, Ames Bros. & Sons; third, J. W. Kerr; fourth, Holmes Bros.

Gelding or Mare Three Years or Over ($50, $40, $30, $20)—First, Truman's Pioneer Stud Farm on Hobson; second, M. C. Peters Mill Co. on Blucher; third, Swift & Co. on Joe; fourth, Truman's Pioneer Stud Farm on Lockinge.

Draft Team in Harness ($50, $40, $30, $20)—First, Truman's Pioneer Stud Farm; second, Swift & Co.; third, M. C. Peters Mill Co.; fourth Swift & Co.

Champion Gelding or Mare ($50, Reserve Ribbon)—Champion, Truman's Pioneer Stud Farm on Hobson; reserve, M. C. Peters Mill Co. on Blucher.

Four Horse Team ($150)—Swift & Company.

Six Horse Team ($150)—Swift & Company.

Stable Manager's Prize (to managers and superintendents of the stables winning the greatest number of ribbons either blue, red, white or pink, in draft horse division, $25, $15, $10)—First, J. O. Singmaster & Son; second, C. G. Good & Son; third, F. A. Huddlestun.

Stable Decorations (for best stable decoration, neatest and most attractive draft horse exhibit, $25, $20, $15, $10)—First, J. O. Singmaster & Son, second, R. W. Hoit & Son; third, Truman's Pioneer Stud Farm; fourth, Frand Huddlestun.

First Prize Farm Team. F. A. Huddleston, Webster City, Iowa.

HORSE SHOW DIVISION

HARNESS AND SADDLE HORSES

Exhibitors—Jesse J. Bass, care Omaha Riding Academy, Omaha, Neb.; Thos. Bass, Mexico, Mo.; L. D. Berry, 5109 Emerson Ave. S., Minneapolis, Minn.; D. H. Buxton and Daughters, Des Moines; Mrs. John A. Cavanagh, 315 37th St., Des Moines; Loula Long Combs, Lees Summit, Mo.; Smith Crane, Omaha Riding Academy, Omaha, Neb.; A. L. Champlin, Ames; Earl M. Dixon, New Boston, Ill.; Raleigh Fry, Colo; H. F. Griffin, Riverside;

J. H. Hogan, Des Moines; Gertrude B. Hardt, Chicago, Ill.; Sarah Meyers Hedges, 334 Century Bldg., Des Moines; Geo. A. Heyl, Washington, Ill.; Grover Hubbell, Des Moines; John E. Kirbye, Jr., Des Moines; T. W. LeQuatte, Des Moines; Mrs. T. W. LeQuatte, Des Moines; Hazel Logan, care Wortham Shows, Detroit, Mich.; Dr. Wilton McCarthy, Des Moines; Fay L. McCarthy, Des Moines; W. W. Maple, Des Moines; Mr. and Mrs. Billy Miller, 315 W. Ninth St., Des Moines; C. E. Monahan, 1610 East Grand, Des Moines; E. D. Moore, Des Moines; R. G. Mundy, Des Moines; E. W. Nash, Omaha Riding Academy, Omaha, Neb.; W. J. O'Brien, 2223 Cleveland Ave., Chicago, Ill.; R. W. Parrott, care Brown Hotel, Des Moines; Bruce Robinson, Osceola; Francis Sterling, Des Moines; B. C. Stringham, Dexter; Charles Van Studdiford, St. Louis, Mo.

JUDGES........................	E. A. TROWBRIDGE, Columbia, Mo. WALTER PALMER, San Jose, Calif.

ROADSTERS.

Stallion, Mare or Gelding ($50, $40, $30, $10)—First, Loula Long Combs on Blackie Girl; second, C. E. Monahan on Jessie Albingen; third, John E. Kirbye, Jr., on Teddy Shea; fourth, Bruce Robinson on Princess Reed.

Pair Stallions, Mares or Geldings ($50)—First, Bruce Robinson on Princess Reed & Mate.

RUNABOUTS.

Stallion, Mare or Gelding ($50, $40, $30, $10)—First, A. L. Champlin on Lady Lightfoot; second, Bruce Robinson on Broskie Dare 14461; third, Thos. Bass on High Brown; fourth, C. E. Monahan on Jessie Albingen.

Pair Stallions, Mares or Geldings ($50, $40, $30)—First, A. L. Champlin on Lucky Boy and Mate; second, Bruce Robinson on King 1859; third, A. L. Champlin on Laddy Lightfoot and Tony.

LADIES' TURNOUT.

Single Mare or Gelding ($50, $40, $30, $10)—First, A. L. Champlin on Highball; second, Earl M. Dixon on Forest King; third, A. L. Champlin on Prince of Greenhill Lady; fourth, Hazel Logan on Brilliant.

Pair Mares or Geldings, or Mare and Gelding ($50, $40, $30, $10)—First, A. L. Champlin on Highball and Mate; second, A. L. Champlin on Tony and Mate; third, Earl M. Dixon on Forest King and Mate; fourth, A. L. Champlin on Lucky Boy and Mate.

HIGH STEPPERS AND PARK HORSES

Stallion, Mare or Gelding Under 15-2 ($50, $40, $30, $10)—First, Bruce Robinson on King 1859; second, Earl M. Dixon on Forest King; third, A. L. Champlin on Pactolus Prince; fourth, A. L. Champlin on Lady Greenhill.

Stallion, Mare or Gelding 15-2 and Over ($50, $40)—First, A. L. Champlin on Highball; second, A. L. Champlin on Lady Lightfoot.

Pair Stallions, Mares or Geldings Under 15-2 ($50, $40, $30)—First, Earl M. Dixon on Forest King and Mate; second, A. L. Champlin on Lady Greenhill and Mate; third, A. L. Champlin on Pactolus Prince and Mate.

Pair Stallions, Mares or Geldings, 15-2 or Over ($50,$40)—First, A. L. Champlin on Highball and Mate; second, A. L. Champlin on Lady Lightfoot and Mate.

Stallion, Mare or Gelding, Any Height, Horse Alone to be Considered ($50, $40, $30)—First, Earl M. Dixon on Forrest King; second, A. L. Champlin on Highball; third, A. L. Champlin on Prince of Greenhill Lady.

GIG HORSES.

Horses Under 15-2 ($50, $40)—First, A. L. Champlin on Pactolus Prince; second, A. L. Champlin on Lady Greenhill.

Horses 15-2 or Over ($50, $40)—First, A. L. Champlin on Highball; second, A. L. Champlin on Lady Lightfoot.

TANDEMS.

Tandem Team, Wheeler Over 15-2 ($50, $40, $30)—First, A. L. Champlin on Highball and Mate; second, A. L. Champlin on Lady Lightfoot and Mate; third, A. L. Champlin on Prince of Greenhills Lady and Mate.

Tandem Team, Wheeler Under 15-2 ($50)—First, A. L. Champlin on Pactolus Prince and Mate.

Tandem Team, Any Size, Horses Alone to be Considered ($50, $40)—First, A. L. Champlin on Pactolus Prince and Mate; second, A. L. Champlin on Lady Lightfoot and Mate.

STABLE MANAGER'S PRIZE.

Managers or Superintendents of the Stables Winning the Greatest Number of Ribbons (either blue, red, white or pink in Harness or Saddle divisions; $25, $15, $10)—First, A. L. Champlin; second, Bruce Robinson; third, Loula Long Combs.

STABLE DECORATIONS.

For Best Stable Decoration (neatest and most attractive harness or saddle horse exhibit; $25, $20, $15, $10)—First, Geo. N. Heyl; second, A. L. Champlin; third, John E. Kirbye Jr.; fourth, Earl M. Dixon.

SADDLE HORSES.

FIVE-GAITED.

Stallion, Four Years Old and Over ($50, $40, $30, $20)—First, Loula Long Combs on General Foch 8445; second, Bruce Robinson on Lonnie McDonald 7114; third, Thos. Bass on King; fourth, W. J. O'Brien on Chief Richlien.

Mare, Four Years Old and Over ($50, $40, $30, $20)—First, Loula Long Combs on Tiger Rose 12972; second, Gertrude B. Hardt on Major's Aurelia 12955; third, Thos. Bass on Francis King; fourth, W. J. O'Brien on Rose Chieftain.

Mare Three Years Old and Under Four ($50, $40)—First, Bruce Robinson on Broskie Dare 14466; second, Thos. Bass on Nancie Reed.

Gelding Four Years Old and Over ($50, $40, $30, $20)—First, Loula Long Combs on Miracle Man; second, E. D. Moore on Elmay; third, Thos. Bass on Over the Top; fourth, W. J. O'Brien on Ed. McDonald.

Pair Five-Gaited Saddle Horses (Mares or Geldings Property of Exhibitor) Ridden by Gentleman and Lady ($50, $40, $30, $20)—First, Gertrude B. Hardt on Golden Flash & Major's Aurelia; second, Bruce Robinson on Dorothy Dare and Missouri Queen; third, E. D. Moore on Elmay & Eva Arnold; fourth, R. G. Mundy on Rex & Royal Chester.

$1,000 FIVE-GAITED SADDLE HORSE STAKE

Stallion, Mare or Gelding, Any Age ($250, $200, $150, $125, $100, $75, $60, $40)—First, Loula Long Combs on Tiger Rose 12972; second, E. D. Moore on Elmay; third, Gertrude B. Hardt on Major's Aurelia; fourth, Loula Long Combs on Judge Thurman; fifth, W. J. O'Brien on Ed. McDonald; sixth, Thos. Bass on Over the Top; seventh, Bruce Robinson on Dorothy Dare 14189; eighth, Gertrude B. Hardt on Golden Flash.

THREE-GAITED.

Mare or Gelding, Any Age, 14-2 to 15 ($50, $40, $30, $20)—First, Loula Long Combs on Tiney Peavine; second, Gertrude B. Hardt on Wonder Miss 13627; third, C. E. Monahan on Babie Monahan; fourth, John J. Kirbye on Freckles.

Mare or Gelding, Any Age, 15 to 15-2 ($50, $40, $30, $20)—First, Loula Long Combs on Susanna; second, Thos. Bass on Violet Thornton; third, W. J. O'Brien on Empress; fourth, E. D. Moore on Thornton Empress.

Mare or Gelding, Any Age, 15-2 and Over, and up to Carrying 175 lbs. ($50, $40, $30, $20)—First, Loula Long Combs on Bohemian Lass; second, W. J. O'Brien on Glitter; third, E. D. Moore on Prince of Dares; fourth, D. H. Buxton & Daughters on Missouri's Best 13579.

Ladies' Saddle Horse, Lady Rider ($50, $40, $30, $20)——First, W. J. O'Brien on Francis Starr; second, Francis Sterling on Best's Baby Doll 12956; third, Gertrude B. Hardt on Wonder Miss; fourth, E. D. Moore on Thornton Empress.

Pair Three-Gaited Saddle Horses (Mares or Geldings, the Property of One Exhibitor) Ridden by Gentleman and Lady ($50, $40)—First, Bruce Robinson on Storm King and Dorothy Dare; second, E. D. Moore on Thornton Empress & Eva Arnold.

$1,000 SADDLE HORSE STAKE, THREE-GAITED

Stallion, Mare or Gelding, Any Age ($250, $200, $150, $125, $100, $75, $60, $40)—First, Loula Long Combs on Susanna; second, Thos. Bass on Violet Thornton; third, E. D. Moore on Thornton Empress; fourth, Loula Long Combs on Bohemian Girl; fifth, Gertrude B. Hardt on Wonder Miss; sixth, W. J. O'Brien on Empress; seventh, Gertrude B. Hardt on Rulsay; eighth, Mrs. John Cavanagh on Midnight Flapper.

Stallion, Mare or Gelding, Any Age, Five-Gaited ($50, $40, $30, $10)—First, Loula Long Combs on General Foch 8445; second, E. D. Moore on Elmay; third, Gertrude B. Hardt on Golden Flash; fourth, Thos. Bass on Over the Top.

COMBINED HARNESS AND SADDLE HORSES.

Stallion, Mare or Gelding, Any Age, Three-Gaited ($50, $40, $30, $10)—First, E. D. Moore on Thornton Empress; second, Loula Long Combs on Susanna; third, W. J. O'Brien on Glitter; fourth, Thos. Bass on Violet Thornton.

HIGH SCHOOL HORSES.

Stallion, Mare or Gelding, Any Age ($50, $40, $30, $20)—First, Thos. Bass on Bell Beach; second, Hazel Logan on Rambler; third, Bruce Robinson on Abraham No. 1; fourth, Hazel Logan on Brilliant.

LOCAL OWNED IN IOWA.

Stallion, Mare or Gelding, Five-Gaited, Three Years or Older ($35, $25, $20, $10)—First, Bruce Robinson on Lonnie McDonald 7114; second, John H. Hogan on Golden Lad; third, Fay L. McCarthy on Premier McDonald 8070; fourth, Bruce Robinson on Dorothy Dare 14189.

Stallion, Mare or Gelding, Three-Gaited, Three Years or Over ($35, $25, $20, $10)—First, Bruce Robinson on Dorothy Dare 14189; second, Grover Hubbell on Bonnie Bluse; third, Mrs. John A. Cavanagh on Midnight Flapper; fourth, D. H. Buxton & Daughter on Missouri's Best 13579.

AMATEUR CLASS, RIDDEN BY OWNER.

Stallion, Mare or Gelding ($35, $25, $20, $10)—First, Francis Sterling on Bests' Baby Doll 12956; second, Mr. and Mrs. Billy Miller on Mahogany Lad; third, T. W. LeQuatte on Votes for Women 13203; fourth, D. H. Buxton & Daughters on Missouri's Best 13579.

HACKNEY.

Stallion Four Years or Over ($40)—First, A. L. Champlin on Brigham Radiant 873.

Stallion or Mare Foal ($20, $15)—First, A. L. Champlin on mare foal; second, A. L. Champlain on Mare Foal.

Yeld Mare Four Years or Over ($40, $25, $15)—First, A. L. Champlin on Lady Greenhill 3281; second, Earl M. Dixon on Rosemary; third, A. L. Champlin on Prince of Greenhill's Lady 3184.

Brood Mare, With Foal at Side ($25)—First, A. L. Champlin on Fair Eliza & Foal 3182.

Champion Mare ($25, Reserve Ribbon)—Champion, A. L. Champlin on Lady Greenhill; reserve, Earl M. Dixon on Rosemary.

PONIES.

Exhibitors—Frank Brideson, Bayard; George Brideson, Panora; Kenneth Burkhardt, Guthrie Center; Earl M. Dixon, New Boston, Ill.; Geo. A. Heyl, Washington, Ill.; Chas. Irvine, Ankeny; Bruce Robinson, Osceola; Paul Smith, 1433 Lyon St., Des Moines; Francis Sterling, Des Moines; Arthur E. Warren, Route 2, Des Moines; D. G. Welty, Nevada; F. R. Wilson, Colo; Grant Young, Bondurant.

Judge................................J. G. Hammer, Ames, Iowa.

WELSH PONIES.

Stallion Four Years or Over ($25)—First, Earl M. Dixon on Model.

Stallion Two Years, Under Three ($25)—First, D. G. Welty on Sir Shaddy.

Stallion or Mare Foal ($25, $15)—First, Francis Sterling; second, D. G. Walty.

Mare Four Years Old or Over ($25, $15, $10, $5)—First, D. G. Welty on Lady Go Bang 954; second, Geo. A. Heyl on Gwindy Jewel 971; third, Earl M. Dixon on Dainty; fourth, Francis Sterling on Lynette of Montrose 984.

Mare Three Years Old and Under Four ($25, $15)—First, Geo. A. Heyl on Gwindy Beauty; second, D. G. Welty on Firefly.

Mare Two Years Old and Under Three ($25)—First, D. G. Welty on White Eyes.

Champion Stallion ($25, Reserve Ribbon)—Champion, Earl M. Dixon on Model; reserve, D. G. Welty on Sir Shaddy.

Champion Mare ($25, Reserve Ribbon)—Champion, D. G. Welty on Lady Go Bang; reserve, Geo. A. Heyl on Gwindy Beauty.

Stallion and Three Mares ($25)—First, D. G. Welty.

SHETLAND PONIES.

Stallion Four Years Old and Over ($25, $15, $10, $5)—First, D. G. Welty on Silver Crescent 18892; second, Earl M. Dixon on Masterpiece; third, D. G. Welty on Locust J. 16600; fourth, A. E. Warren on Black Beauty.

Stallion Three Years Old and Under Four ($25, $15, $10)—First, Francis Sterling on Aristocrat; second, Geo. Brideson on Jim Boy 18473; third, F. R. Wilson on Toy K. 18500.

Stallion Two Years Old and Under Three ($25, $15, $10, $5)—First, Francis Sterling on Blackhawk; second, D. G. Welty on Prince A. 19231; third, F. R. Wilson on Pride of Linwood 18392; fourth, F. R. Wilson.

Stallion or Mare Foal ($25, $15, $10, $5)—First, D. G. Welty; second, F. R. Wilson; third, Francis Sterling on Boston's Benjamin; fourth, Frank Brideson.

Mare Four Years Old or Over ($25, $15, $10, $5)—First, Earl M. Dixon on Suzanna D.; second, Geo. A. Heyl on Hamilton Old Rose 18313; third. D. G. Welty on Romping Flash; fourth, D. G. Welty on Princess Welcome

Mare Three Years Old and Under Four ($25, $15, $10, $5)—First, D. G. Welty on Hamilton Larigo's Best; second, Earl M. Dixon on Fire Night; third, D. G. Welty on Star O' West; fourth, Grant Young on May.

Mare Two Years Old and Under Three ($25, $15, $10, $5)—First, D. G. Welty on Sonora; second, Francis Sterling on Columbia Cole 19074; third D. G. Welty on Priscilla's Pride; fourth, Grant Young on Pearl.

Champion Stallion ($25, Reserve Ribbon)—Champion, D. G. Welty on Silver Crescent; reserve, Earl M. Dixon on Master Piece.

Champion Mare ($25, Reserve Ribbon)—Champion, Earl M. Dixon on Suzanna D.; reserve, D. G. Welty on Larigo's Best.

Grand Display, Stallion and Three Mares ($25, $15, $10)—First, D. G. Welty; second, Earl M. Dixon; third, Francis Sterling.

HACKNEY PONIES.

Stallion Four Years Old or Over ($25, $15, $10)—First, Geo. A. Heyl on Trillo Supreme 2330; second, Francis Sterling on Lammermoor King 1859; third, Geo. A. Heyl on Dilhampton.

Mare Four Years Old and Over ($25, $15, $10)—First, Geo. A. Heyl on Dinarth Bell 3242; second, D. G. Welty on Consuello 3298; third, Geo. A. Heyl on Rougham Ladas 3238.

Champion Stallion ($25, Reserve Ribbon)—Champion, Geo. A. Heyl on Trillo Supreme; reserve, Francis Sterling on Lammermoor King.

Champion Mare ($25, Reserve Ribbon)—Champion, Geo. A. Heyl on Dinarth Bell; reserve, D. G. Welty on Consuello.

PONIES IN HARNESS.

Pony Under 10½ Hands ($25, $15, $10, $5)—First, Earl M. Dixon on Suzanna D.; second, Geo. A. Heyl on Hamilton Old Rose; third, Francis Sterling on Ola Larigo; fourth, Francis Sterling on Aristocrat.

Pair Ponies Under 10½ Hands ($25, $15, $10, $5)—First, Geo. A. Heyl on King Larigo and Hamilton Old Rose; second, D. G. Welty on Larigos Best and Kensetta; third, Francis Sterling on Aristocrat and Bonnie; fourth, Earl M. Dixon on Masterpiece and Ovilta.

Pony 10½ to 11½ Hands ($25, $15, $10, $5)—First, D. G. Welty on Silver Crescent; second, Earl M. Dixon on Lord Fauntleroy; third, Francis Sterling; fourth, D. G. Welty on Romping Flash.

Pair Ponies 10½ to 11½ Hands ($25, $15, $10, $5)—First, D. G. Welty on Silver Crescent and Princess Welcome; second, Francis Sterling on Nip and Tuck; third, Earl M. Dixon on Lord Fauntleroy and Suzanna D.; fourth, Earl M. Dixon on Ruthie and Fire Night.

Pony 11½ to 12½ Hands ($25, $15, $10, $5)—First, Earl M. Dixon on Model; second, Earl M. Dixon on Dixon's Pattern; third, D. G. Welty on Lady Go Bang; fourth, Geo. A. Heyl on Heyl's Pride.

Pair Ponies 11½ to 12½ Hands ($25, $15, $10, $5)—First, Geo. A. Heyl on Gwindy Beauty and Heyl's Pride; second, Earl M. Dixon on Model and Dixon's Pattern; third, D. G. Welty on Lady Go Bang and Sir Shaddy; fourth, Francis Sterling on Lynette and Babe.

Pony 12½ to 13½ Hands ($25, $15, $10, $5)—First, Geo. A. Heyl on Trillo Supreme; second, Earl M. Dixon on Dainty; third, D. G. Welty on Consuello; fourth, Geo. A. Heyl on Dilhampton.

Pair Ponies 12½ to 13½ Hands ($25, $15, $10)—First, Geo. A. Heyl on Trillo Supreme and Dinarth Bell; second, Geo. A. Heyl on Royal Flash and Peggy Brennin; third, Earl M. Dixon on True Blue and Dainty.

Pony 13½ to 14½ Hands ($25, $15)—First, Francis Sterling; second, Geo. A. Heyl on Rougham Ladas.

Tandem Team Under 12½ Hands ($25, $15, $10, $5)—First, Earl M. Dixon on Model and Dixon's Pattern; second, Geo. A. Heyl on Gwindy Beauty and Heyl's Pride; third, D. G. Welty on Romping Flash and Princess Welcome; fourth, Earl M. Dixon on Suzanna D. and Ruthie.

Tandem Team Over 12½ Hands ($25, $15)—First, Geo. A. Heyl on Trillo Supreme and Dinarth Bell; second, Earl M. Dixon on True Blue and Dainty.

Four-in-Hand Under 12½ Hands ($25, $15, $10)—First, D. G. Welty; second, Francis Sterling; third, Earl M. Dixon.

Four-in-Hand Over 12½ Hands ($25, $15)—First, Earl M. Dixon; second, Geo. A. Heyl.

Champion Harness Pony ($25, Reserve Ribbon)—Champion, Earl M. Dixon on Model; reserve, D. G. Welty on Silver Crescent.

Champion Pair Harness Ponies ($25, Reserve Ribbon)—Champion, D. G. Welty on Silver Crescent and Princess Welcome; reserve, Francis Sterling on Gwindy Beauty and Heyl's Pride.

PONIES UNDER SADDLE.

Saddle Pony 10½ to 11½ Hands ($15, $10, $5)—First, D. G. Welty on Princess Welcome; second, Francis Sterling on Nip; third, Francis Sterling on Tuck.

Saddle Pony Under 10½ Hands ($15, $10, $5)—First, Francis Sterling on Ola Larigo; second, D. G. Welty on Larigo's Best; third, Francis Sterling on Bonnie.

Saddle Pony 11½ to 12½ Hands ($15, $10, $5)—First, Geo. A. Heyl on Gwindy Beauty; second, Francis Sterling on Le Nett; third, Geo. Brideson on Dolly.

Saddle Pony 12½ to 13½ Hands ($15, $10, $5)—First, Geo. A. Heyl on Peggy Brennin; second, Geo. A. Heyl on Royal Flash; third, F. R. Wilson.

Saddle Pony 13½ to 14½ Hands ($15)—First, Francis Sterling on Major.

Champion Saddle Pony ($25, Reserve Ribbon)—Champion, Geo. A. Heyl on Royal Flash; reserve, D. G. Welty on Princess Welcome.

STABLE MANAGERS' PRIZE.

Managers or Superintendents of the Stables Winning the Greatest Number of Ribbons (either blue, red, white or pink, in pony classes $25, $15, $10)—First, D. G. Welty; second, Geo. A. Heyl; third, E. M. Dixon.

STABLE DECORATIONS.

For Best Stable Decorations (neatest and most attractive pony exhibit; $25, $20, $15, $10)—First, D. G. Welty; second, Earl M. Dixon; third, Francis Sterling; fourth, F. R. Wilson.

MULES.

EXHIBITORS—Bert Barnett, Gallatin, Mo.; Ira Benton, Bondurant; Wyatt Carr and Son, Collins; Clyde Collins, Dallas Center; Holmes Bros., Milton; John Hubly, Mason City, Ill.; Thos. E. Hughes, Knoxville; F. L. Hutson & Son, State Center; J. W. Lisle, Jamaica.

JUDGE..............................E. A. TROWBRIDGE, Columbia, Mo.

Mules Four Years Old or Over ($25, $20, $10, $5)—First, F. L. Hutson & Son; second, F. L. Hutson & Son; third, F. L. Hutson & Son; fourth, J. W. Lisle on Ruby.

Mules Over Three, Under Four ($25, $20, $10)—First, F. L. Hutson & Son; second, F. L. Hutson & Son; third, Thos. E. Hughes.

Mules Over Two, Under Three ($25, $20, $10, $5)—First, J. W. Lisle on Molly; second, Clyde Collins; third, Ira C. Benton; fourth, Ira C. Benton.

Mules Over 1 and Under Two ($25, $20, $10, $5)—First, F. L. Hutson & Son; second, Thos. E. Hughes; third, F. L. Hutson & Son; fourth, Thos. E. Hughes.

Mule Colt Under One Year Old ($25)—First, Holmes Bros. on Gyp.

Mules Over 15 Hands ($25, $20, $15, $5)—First, F. L. Hutson & Son; second, F. L. Hutson & Son; third, J. W. Lisle on Molly; fourth, F. L. Hutson & Son.

Mule Under 15 Hands ($25, $20, $10, $5)—First, F. L. Hutson & Son; second, F. L. Hutson & Son; third, F. L. Hutson & Son; fourth, F. L. Hutson & Son.

Pair Mules Over 2,400 Pounds to Be Shown in Harness ($25, $20, $10, $5)—First, F. L. Hutson & Son; second, J. W. Lisle on Ruby and Topsy; third, F. L. Hutson & Son; fourth, Thos. E. Hughes.

Pair Mules Over 2,400 Pounds to Be Shown in Harness ($25, $20, $10, $5)—First, F. L. Hutson & Son; second, J. W. Lisle on Ruby and Topsy; third, F. L. Hutson & Son; fourth, Thos. E. Hughes.

Pair Mules Under 2,400 Pounds to Be Shown in Harness ($25, $20)—First, F. L. Hutson & Son; second, F. L. Hutson & Son.

Tandem Team ($25)—First, F. L. Hutson & Son.

Four Mule Team ($25, $15, $10)—First, F. L. Hutson & Son; second, J. W. Lisle on Topsy and Bess; third, Thos. E. Hughes.

Five Mules, Any Age ($25, $15, $10)—First, F. L. Hutson & Son; second, J. W. Lisle; third, Thos. E. Hughes.

Champion Mules, Any Age ($25, Reserve Ribbon)—Champion, F. L. Hutson & Son on Josie; reserve, F. L. Hutson & Son on Ruth.

Champion Pair of Mules ($25, Reserve Ribbon)—Champion, F. L. Hutson & Son on Jane and Josie; reserve, J. W. Lisle on Topsy and Ruby.

JACKS AND JENNETS.

EXHIBITORS—Holmes Bros., Milton; F. L. Hutson & Son, State Center.

JUDGE............................E. A. TROWBRIDGE, Columbia, Mo.

Jack Four Years or Over ($25)—First, Holmes Bros. on Kentucky King.
Champion Jack ($25)—Champion, Holmes Bros. on Kentucky King.

CATTLE DEPARTMENT

SUPERINTENDENT.........................H. L. PIKE, Whiting, Iowa.

SHORTHORNS.

EXHIBITORS—A. B. Amundson, Dawson; Brandt Bros., Garnavillo; Harry Brown, Adel; Perry O. Brown, Lamoni; Edwin Byams, Dysart; W. O. Campbell, La Porte City; Z. T. Dunham & Sons, Dunlap; Dubes & Ohlson, Aurelia; Edellyn Farms, Wilson, Ill.; A. R. Fennern, Avoca; Gallmeyer Bros., Mechanicsville; W. E. Graham & Son, Prairie City; Hague & Girton, Fairfield; C. E. Hoover & Son, Delphos; Hopley Stock arm, Atlantic; J. T. Judge, Carroll; J. Kardel & Son, Walcott; Krizer Bros., Eddyville; H. C. Lookabaugh, Watonga, Oklahoma; Loveland Stock Farm, Mt. Pleasant; J. W. McDermott, Kahoka, Missouri; Wm. Milne, Mt. Pleasant; Miller Bros., Britt; Jos. Miller & Son, Granger, Missouri; J. E. Mann, Woodbine; The Maxwell-Miller Cattle Co., Littleton, Colorado; J. S. Naylor, Clear Lake; Nelson Bros., Dunlap; L. C. Oloff, Ireton; E. D. Palmer & Son, Ocheyedan; W. W. Parkhill, Sigourney; Paul Purviance, Minburn; W. F. Rapp, St. Edwards, Nebraska; Reynolds Bros., Lodi, Wisconsin; Rookwood Farm, Ames; Geo. Rosengrant & Sons, Garden Grove; A. C. Shallenberger, Alma, Nebraska; Ben G. Studer, Wesley; W. B. Tague & Sons, Kirkman; W. J. Telfer, Prairie City; H. O. Tellier, Farmington, Minnesota; Geo. F. Thede and Son, Durant; Uppermill Farm, Wapello; Freeman B. Wood, Eldora; J. G. Westrope, Harlan.

JUDGE.............................PROF. H. H. KILDEE, Ames, Iowa.

Bull Three Years Old or Over ($75, $60, $50, $40, $30, $25, $20, $15, $10, $10)—First, J. W. McDermott on Marshal Joffre 807343; second, C. E. Hoover & Son on Count Whiteball 788195; third, Wm. Milne on Cumberland Marshal; fourth, The Maxwell-Miller Cattle Co. on Beauford Proud Duke 1069425; fifth, W. E. Graham & Son on Maxwalton Pure Gold II 699946; sixth, Joseph Miller & Sons on Pride of Albion 730697; seventh, H. O. Tellier on Superb Secret 96167; eighth, Edellyn Farms on Whitehall King 792762; ninth, A. B. Amundson on Acanthus Knight 700426; tenth, L. C. Oloff on Avon's Model 858930.

Bull Two Years Old and Under Three ($75, $60, $50, $40, $30, $25, $20, $15, $10, $10)—First, H. C. Lookabaugh on Maxhall Commander 973688; second, Uppermill Farm on Villagers Wanderer 978595; third, W. F. Rapp on Silver Viscount 838024; fourth, Joseph Miller & Sons on Cumberland Matadore 926116; fifth, The Maxwell Miller Cattle Co. on Broadhook's Stamp 983999; sixth, The Maxwell Miller Cattle Co. on Modest King 950631; seventh, J. W. McDermott on Marshal Hope 1035681; eighth, A. C. Schallenberger on Matchless Marshal 946857; ninth, J. Kardel & Son on Parkdale Bondsman 956105; tenth, J. W. McDermott on Choice Goods Marshal.

Senior Yearling Bull ($75, $60, $50, $40, $30, $20, $15, $10)—First, Hopley Stock Farm on Beau's Stamp 989787; second, Rookwood Farm on Rookwood Knight 993183; third, Rookwood Farm on Lavender Taft 1053384; fourth, W. E. Graham & Sons on Village Champion 1003573; fifth, Hague & Girton on Revelanta Crown 1007486; sixth, J. W. McDermott on Rosedale Marshal 1035682; seventh, Krizer Bros. on Village Avondale 1003892; eighth, Rosengrant & Son, Geo. on Cluny Cumberland 1042492; ninth, A. C. Schallenberger on Golden Villager 1034495.

Junior Yearling Bull ($75, $60, $50, $40, $30, $25, $20, $15, $15, $15, $15, $10, $10, $10, $10)—First, Dubes & Ohlson on Shadow Lawn Master 1000257; second, H. C. Lookabaugh on Maxhall Searchlight 1058911; third, W. E. Graham & Sons on Victor's Excellence 1049695; fourth, The Maxwell Miller Cattle Co. on Max-Mill Parson 1027263; fifth, Joseph Miller & Sons on Oakdale Rodney 1074330; sixth, Miller Bros. on Villagers Champion 1052187; seventh, The Maxwell Miller Cattle Co. on Max-Mill Marmion 1027261; eighth, Dubes & Ohlson on Villagers Sunray 1107781; ninth, Geo. F. Thede & Son on King Gainford 1104194; tenth, J. T. Judge on Roan Sort 1095226; eleventh, Uppermill Farm on Villagers Morning 1084776; twelfth, Perry O. Brown on White Joffre; thirteenth, J. G. Westrope on Village Lustre 1094478; fourteenth, H. C. Lookabaugh on Maxhall Duthie 1058910; fifteenth, Edellyn Farms on Modesty King 1004573.

Senior Bull Calf ($75, $60, $50, $40, $30, $25, $20, $15, $15, $15, $15, $10, $10, $10, $10)—First, The Maxwell Miller Cattle Co. on Max-Mill Bishop 1083180; second, H. C. Lookabaugh on Maxhall Acers 1093608; third, Edellyn Farms on Smiling King 1085326; fourth, W. E. Graham & Sons on Maxwalton Chief 1091832; fifth, A. C. Schallenberger on Ashbourne Marshall; sixth, A. R. Fennern on Dale's Justice 1112399; seventh, Joseph Miller & Sons on Oakdale Ornament; eighth, A. R. Fennern on Dale's Gallant; ninth, W. W. Parkhill on Villager's Victor; tenth, Miller Bros. on Villager's Paymaster 1111791; eleventh, Wm. Milne on Shadeland Gift; twelfth, Hague & Girton on Revelanta Giftford; thirteenth, J. G. Westrope on Maid's Villager 1094473; fourteenth, Miller Bros. on Villager's Monarch 5th 1105950; fifteenth, H. O. Tellier on Superb Prince 1112621.

Junior Bull Calf ($75, $60, $50, $40, $30, $25, $20, $15, $15, $15, $15, $10, $10, $10, $10)—First, Dubes & Ohlson on Shadow Lawn Goods 1110493; second, Miller Bros. on Village Javelin III 111790; third, Joseph Miller & Sons on Choice Again; fourth, Gallmeyer Bros. on Villager's Gloster II 1088438; fifth, H. C. Lookabaugh on Maxhall Lord 1093609; sixth, Dubes & Ohlson on Shadow Lawn Model 1110494; seventh, H. O. Tellier on Superb Master 1112620; eighth, Edellyn Farms on Edellyn Nonsuch 1085323; ninth, J. G. Westrope on Knights Villager 1094472; tenth, A. C. Schallenberger on Ashbourne Squire; eleventh, Hague & Girton on Revelanta Villagift; twelfth, Joseph Miller & Sons on Oakdale Champion; thirteenth, L. C. Oloff on Golden Model 1105878; fourteenth, J. Kardel & Son on Bondsmans Baronet 1110278; fifteenth, J. Kardel & Son on Baron Bondsman 1110277.

Cow Three Years Old or Over ($75, $60, $50, $40, $30, $25, $20, $15, $10, $10)—First, Wm. Milne on Crimson Lass 507129; second, H. C. Lookabaugh on Pleasant Verne II 785225; third, The Maxwell Miller Cattle Co. on Max-Mill Myrtle 857984; fourth, Joseph Miller & Sons on Cumberland Bess III 679935; fifth, Uppermill Farm on Victoria II 596467; sixth, J. Kardel & Son on Parkdale Clipper IV 859796; seventh, Wm. Milne on Royal Lady;

eighth, F. D. Palmer & Sons on Lone Elm Victoria 863635; ninth, W. E. Graham & Sons on Glendale Gwynne 595113; tenth, A. B. Amundson on Bonnie Arabella 841152.

Cow With Own Calf by Side ($75, $60, $50, $40, $30, $25, $20, $15)—First, The Maxwell Miller Cattle Co. on Clover Leaf Lovely II 476692; second, Loveland Stock Farm on Silver Mist 765344; third, Wm. Milne on Nellie Goods 581609; fourth, J. T. Judge on Villgers Rosy 733692; fifth, Joseph Miller & Sons on Miss Cumberland II 796142; sixth, Krizer Bros. on Bonnie Girl 721016; seventh, W. O. Campbell on Mina Ramsdin 250425; eighth, L. C. Oloff on Hampton's Beauty 796864.

Heifer Two Years Old and Under Three ($75, $60, $50, $40, $30, $25, $20, $15, $10, $10)—First, A. C. Shallenberger on Supremacy 836498; second, The Maxwell Miller Cattle Co. on Max-Mill Lovely 949927; third, W. E. Graham & Sons on Royal Goldie 866912; fourth, The Maxwell Miller Cattle Co. on Max-Mill Susan 944929; fifth, Uppermill Farm on Villagers Sue III 925493; sixth, J. G. Westrope on Fair Sultana V 950700; seventh, A. B. Amundson on Knights Bettie 962186; eighth, H. C. Lookabaugh on Pleasant Clipper 995346; ninth, L. C. Oloff on Avons Dorothy 985107; tenth, A. B. Amundson on Isabel's Blossom 938771.

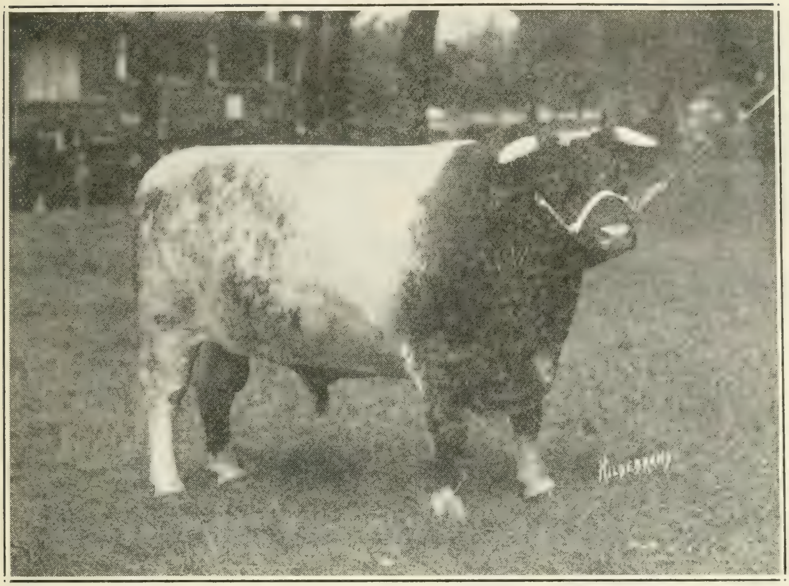
Senior Yearling Heifer ($75, $60, $50, $40, $30, $25, $20, $15, $15, $15, $15, $10, $10, $10, $10)—First, H. O. Tellier on Coronet Sultana 1034336; second, C. E. Hoover & Son on Mysie Whitehall 979068; third, Joseph Miller & Sons on Orange Blossom IX 1026009; fourth, A. C. Schallenberger on Siren 1009368; fifth, H. O. Tellier on Miss Dalbreak IV 1024969; sixth, W. F. Rapp on Minorca Beauty 1105503; seventh, W. W. Parkhill on Gainfords Sylvia 1010397; eighth, Uppermill Farm on Villagers Lustre 1045252; ninth, A. R. Fennern on Jealous Maid II 1025253; tenth, Hopley Stock Farm on Village Blossom III 989806; eleventh, W. E. Graham & Sons on Village Bessie 1003582; twelfth, Edellyn Farms on Edellyn Jannet 1004578; thirteenth, H. C. Lookabaugh on Pleasant Maid 1046131; fourteenth, J. T Judge on Sarcasm IV 1030428; fifteenth, L. C. Oloff on Lady Abarelle 1021936.

Junior Yearling Heifer ($75, $60, $50, $40, $30, $25, $20, $15, $15, $15, $15, $10, $10, $10, $10)—First, Miller Bros. on Village Rosebud 1026117; second, Dubes & Ohlson on Shadow Lawn Maud 1000270; third, Joseph Miller & Sons on Miss Cumberland III 1082533; fourth, J. G. Westrope on Village Princess 1094485; fifth, F. D. Palmer & Sons on Lone Elm Florenna 1030169; sixth, A. R. Fennern on Bramble Bud V 1025249; seventh, Edellyn Farms on Edellyn Eliza II 1004577; eighth, Miller Bros. on Villagers Sue III 1010012; ninth, The Maxwell Miller Cattle Co. on Max-Mill Secret 1027271; tenth, Dubes & Ohlson on Lady Violet IX 1000266; eleventh, Perry O. Brown on Cumberland Gem II; twelfth, A. C. Schallenberger on Meadow Blossom 1004225; thirteenth, H. C. Lookabaugh on Pleasant Victoria IV 1059383; fourteenth, W. E. Graham & Sons on Maxwalton Princess 1089121; fifteenth, W. E. Graham & Sons on Lady Radium 1083112.

Senior Heifer Calf ($75, $60, $50, $40, $30, $25, $20, $15, $15, $15, $15, $10, $10, $10, $10)—First, Uppermill Farm on Bessie 33d; second, Edellyn Farms on Edellyn Whimsical II 1085336; third, Joseph Miller & Sons on Oakdale Mayflower VI; fourth, The Maxwell Miller Cattle Co. on Max-Mill Rosemary 1083186; fifth, Joseph Miller & Sons on Flower Cumberland II 1082531; sixth, The Maxwell Miller Cattle Co. on Max-Mill Lady Annie 1083185; seventh, Miller Bros. on Bessie 84th 1105952; eighth, C. E. Hoover & Son on Mysie Whitehall II; ninth, W. E. Graham & Sons on Maxwalton Mary 1091842; tenth, H. C. Lookabaugh on Pleasant Gloster VI 1093610; eleventh, J. T. Judge on Lady Sorters 1086365; twelfth, Edellyn Farms on Edellyn Undine II 1102980; thirteenth, J. G. Westrope on Village Queen 1094486; fourteenth, H. O. Tellier on Fairdale Beauty 1112623; fifteenth, Edellyn Farms on Edellyn Maid IV 1085333.

Senior Champion Bull ($75)—J. W. McDermott on Marshall Joffre.

Junior Champion Bull ($75)—Hopley Stock Farm on Beau's Stamp.



MARSHALL JOFFRE

Grand Champion Shorthorn Bull. J. W. McDermott, Kahoka, Mo.

Grand Champion Bull, Any Age ($75)—J. W. McDermott on Marshall Joffre.

Senior Champion Female ($75)—A. C. Schallenberger on Supremacy.

Junior Champion Female ($75)—Miller Bros. on Village Rosebud.

Grand Champion Female, Any Age ($75)—A. C. Schallenberger on Supremacy.

Graded Herd ($90, $75, $70, $60, $50, $40, $30, $20, $15, $15)—First. The Maxwell Miller Cattle Co.; second, Uppermill Farm; third, Joseph Miller & Son; fourth, H. C. Lookabaugh; fifth, A. C. Schallenberger; sixth, J. G. Westrope; seventh, Wm. Milne; eighth, W. E. Graham & Sons; ninth, H. O. Tellier; tenth, A. B. Amundson.

Yearling Herd ($80, $65, $60, $50, $40, $30, $20, $15, $10, $10)—First, Dubes & Ohlson; second, Miller Bros.; third, Hopley Stock Farm; fourth, Joseph Miller & Sons; fifth, H. C. Lookabaugh; sixth, Edellyn Farms; seventh, W. E. Graham & Sons; eighth, Uppermill Farm; ninth, J. G. Westrope; tenth, A. R. Fennern.

Calf Herd ($80, $65, $60, $50, $40, $30, $20, $15, $10, $10)—First, Joseph Miller & Sons; second, The Maxwell Miller Cattle Co.; third, Edellyn Farms; fourth, H. C. Lookabaugh; fifth, Dubes & Ohlson; sixth, W. E. Graham & Sons; seventh, Uppermill Farm; eighth, A. R. Fennern; ninth, H. O. Tellier; tenth, A. C. Schallenberger.

Get of Sire ($90, $75, $70, $60, $50, $40, $30, $20, $15, $15)—First, The Maxwell Miller Cattle Co.; second, Dubes & Ohlson; third, Miller Bros.; fourth, Edellyn Farms; fifth, Joseph Miller & Sons; sixth, Uppermill Farm; seventh, J. W. McDermott; eighth, H. C. Lookabaugh; ninth, Hopley Stock Farm; tenth, W. E. Graham.

Three Bulls, Any Age, Owned by Exhibitor ($75, $60, $50, $40, $30, $25, $20, $15, $10, $10)—First, H. C. Lookabaugh; second, Dubes & Ohlson;

third, J. W. McDermott; fourth, The Maxwell Miller Cattle Co.; fifth, Joseph Miller & Sons; sixth, The Maxwell Miller Cattle Co.; seventh, Miller Bros.; eighth, W. E. Graham & Sons; ninth, Edellyn Farms; tenth, Uppermill Farm.

Two Bulls, Any Age, Bred and Owned by Exhibitor ($75, $60, $50, $40, $30, $25, $20, $15, $10, $10)—First, H. C. Lookabaugh; second, Dubes & Ohlson; third, J. W. McDermott; fourth, The Maxwell Miller Cattle Co.; fifth, Hopley Stock Farm; sixth, Uppermill Farm; seventh, Edellyn Farms; eighth, Joseph Miller & Sons; ninth, Miller Bros.; tenth, Joseph Miller & Sons.

IOWA SHORTHORN SPECIALS.

Bull Three Years Old or Over ($20, $15, $12, $10, $10, $10)—First, S. P. Hoover on Count Whitehall 788195; second, Wm. Milne on Cumberland Marshall 8th; third, W. E. Graham on Maxwalton Pure Gold 2nd 69946; fourth, L. C. Oloff on Avon's Mode 858930; fifth, W. W. Parkhill on Coronet Villager; sixth, J. G. Westrope on Village Brigand 720685.

Bull Two Years, Under Three ($20, $15)—First, Uppermill Farm on Villager's Wanderer 978595; second, J. Kardel & Son on Parkdale Bondsman 956105.

Bull, Senior Yearling ($20, $15, $12, $10, $9, $8)—First, Hopley Farm, on Beau's Stamp 989787; second, Rookwood Farm on Rookwood Knight 993183; third, J. W. McDermott on Lavender Taft 1053384; fourth, W. E. Graham on Village Champion 1003573; fifth, Hauge & Girton on Revelante Crown 1007486; sixth, Krizer Bros. on Village Avondale 1003892.

Bull, Junior Yearling ($20, $15, $12, $10, $10, $10, $8)—First, Dubes & Ohlson on Shadow Lawn Master 1000257; second, W. E. Graham on Victor's Excellence 1049695; third, Miller Bros. on Villager's Champion 1052187; fourth, Dubes & Ohlson on Villager's Sunray 1107781; fifth, Geo. Thede & Son on King Gainford 1104194; sixth, J. T. Judge on Roan Sort 1095226; seventh, Uppermill Farm on Villagers Morning 1084776.

Bull, Senior Calf ($20, $15, $12, $10, $10, $10, $8)—First, W. E. Graham on Maxwalton Chief 1091832; second, A. R. Fennern on Dale's Justice 1085326; third, A. R. Fennern on Dale's Gallant; fourth, W. W. Parkhill on Villager's Victor; fifth, Miller Bros. on Village Paymaster 1111791; sixth, Wm. Milne on Shadeland Gift; seventh, Hague & Girton on Revelanta Giftford.

Bull, Junior Calf ($20, $15, $12, $10, $10, $10, $8)—First, Dubes & Ohlson on Shadow Lawn Goods 1110493; second, Miller Bros. on Village Javelin 3rd 1111790; third, Gallmeyer Bros. on Villager's Gloster 2d 1088438; fourth, Dubes & Ohlson on Shadow Lawn Model 1110494; fifth, J. G. Westrope on Knights Villager 1094472; sixth, Hague & Girton on Revelanta Villagift; seventh, L. C. Oloff on Golden Model 1105878.

Cow Three Years Old or Over ($20, $15, $12, $10, $10, $10)—First, Wm. Milne on Crimson Lass 507129; second, Uppermill Farm on May Sulton 195670; third, J. Kardel & Son on Parkdale Clipper 4th 859796; fourth, Wm. Milne on Royal Lady; fifth, F. D. Palmer & Son on Lone Elm Victoria 863635; sixth, W. E. Graham on Glendale Gwynne 595113.

Heifer Two Years, Under Three ($20, $15, $12, $10, $10, $10, $8)—First, W. E. Graham on Royal Goldie 866912; second, Uppermill Farm on Villager's Sue III 925493; third, J. G. Westrope on Fair Sultana 5th 950700; fourth, L. C. Oloff on Avons Dorothy 985107; fifth, Krizer Bros. on Mildred Lavender 7th 900397; sixth, J. T. Judge on Nonpareil Mistress 995325; seventh, J. T. Judge on Princess Rose 995327.

Heifer, Senior Yearling ($20, $15, $12, $10, $10, $10, $8)—First, C. E. Hoover on Mysie Whitehall 979068; second, W. M. Parkhill on Gainford's Sylvia 1010397; third, Uppermill Farm on Villager's Lustre 1045252; fourth, A. R. Fennern on Jealous Maid 2nd 1025253; fifth, Hopley Farm on Village Blossom 3rd 989806; sixth, W. E. Graham on Village Bessie 1003582; seventh, J. T. Judge on Sarcasm IV 1030428.

MILKING SHORTHORNS.

EXHIBITORS—R. R. Clampitt, New Providence; Hollandale Farms, Milton; Oakland Stock Farm, Lime Springs.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Heifer, Junior Yearling ($20, $15, $12, $10, $10, $10, $8)—First, Miller Bros. on Village Rosebud 1026117; second, Dubes & Ohlson on Shadow Lawn Maud 1000270; third, J. G. Westrope on Village Princess 1094485; fourth, F. D. Palmer on Lone Elm Florella 1030169; fifth, A. R. Fennern on Bramble Bud 5th 1025249; sixth, Miller Bros. on Villager's Sue 3rd 1010012; seventh, Dubes & Ohlson on Lady Violet 9th 1000266.

Heifer, Senior Calf ($20, $15, $12, $10, $10, $10, $8)—First, Uppermill Farm on Bessie 33rd; second, Miller Bros. on Bessie 84th 1105952; third, C. E. Hoover on Mysie Whitehall 2d; fourth, W. E. Graham on Maxwalton Mary 1091842; fifth, J. T. Judge on Lady Sortess 1086365; sixth, J. G. Westrope on Village Queen 1094486; seventh, Dubes & Ohlson on Lady Swan 10th 1110496.

Bull Three Years Old or Over ($20)—First, R. R. Clampitt on White Prince 648027.

Bull Two Years Old and Under Three ($20, $15)—First, Hollandale Farm on Ireby Lord 926076; second, R. C. Clampitt on Daisy's Prince 1009382.

Bull One Year Old and Under Two ($20, $15, $10)—First, Hollandale Farm on English King 1051142; second, Oaklawn Stock Farm on Peer of Oaklawn 1008954; third, R. R. Clampitt on Edgewood Lad.

Bull Under One Year ($20, $15)—First, Hollandale Farm on Favorite; second, R. R. Clampitt on Edgewood Dairyman.

Cow Five Years Old or Over, in Milk ($30, $20, $15, $10)—First, Oaklawn Stock Farm on Dairymaid 179439; second, R. R. Clampitt on Florence 199573; third, Hollandale Farm on Dairymaid 5th 615224; fourth, R. R. Clampitt on Roan Duchess II 162090.

Cow Three Years Old and Under Five, in Milk ($30, $20, $15)—First, Hollandale Farm on Dairymaid 24th 713841; second, R. R. Clampitt on Florence II 714662; third, Oaklawn Stock Farm on Maxie of Oaklawn 843192.

Heifer Two Years Old and Under Three ($20, $15, $10)—First, Hollandale Farm on Dorcas Clay 960826; second, R. R. Clampitt on Fairy Dale 900136; third, Oaklawn Stock Farm on Gem of Oaklawn 956573.

Heifer One Year Old and Under Two ($20, $15, $10, $10)—First, R. R. Clampitt on Edgewood Duchess 1048722; second, Oaklawn Stock Farm on Violet of Oaklawn 1076247; third, Hollandale Farm on Rosemaid II 1025844; fourth, R. R. Clampitt on Princess Ellen 1081787.

Senior Heifer Calf ($20, $15, $10, $10)—First, Oaklawn Stock Farm on Snowdrop of Oaklawn 1065900; second, Hollandale Farm on Waterloo Queen; third, R. R. Clampitt on Princess Dora; fourth, Hollandale Farm on Dairy Queen.

Senior Champion Bull ($20)—R. R. Clampitt on White Prince.

Junior Champion Bull ($20)—Hollandale Farm on English King.

Grand Champion Bull, Any Age ($20)—R. R. Clampitt on White Prince.

Senior Champion Female ($20)—Oaklawn Stock Farm on Dairy Maid.

Junior Champion Female ($20)—Oaklawn Stock Farm on Snowdrop of Oaklawn.

Grand Champion Female, Any Age ($20)—Oaklawn Stock Farm on Dairy Maid.

Graded Herds ($40, $30)—First, R. R. Clampitt; second, Hollandale Farm.

Yearling Herd ($30)—R. R. Clampitt.

Calf Herd ($30, $25)—First, Hollandale Farms; second, R. R. Clampitt.

Get of Sire ($40, $30, $20)—First, Hollandale Farm; second, R. R. Clampitt; third, Oaklawn Stock Farm.

Three Cows, in Milk, Owned by Exhibitor ($35, $25)—First, Hollandale farm; second, R. R. Clampitt.

Two Cows, in Milk, Bred and Owned by Exhibitor ($30)—Hollandale Farm.

HEREFORDS.

EXHIBITORS—Earnest Abbe, Toledo; B. H. Bishop, State Center; W. N. W. Blayney, Denver, Colo.; Mrs. V. M. Brazelton, Ankeny; E. M. Cassady & Son, Whiting; P. M. Christenson, Lone Rock; Lloyd T. Coffey, Humeston; Jesse Engle & Son, Sheridan, Mo.; Leonard Formanek, Chelsea; Ferguson Bros., Canby, Minn.; Wallace & E. G. Good, Grandview, Mo.; T. M. Hayden, Creston; Hall Bros., Stratford; Overton Harris & Sons, Harris, Mo.; Heath & Pearson, Villisca; Joseph Kadolph, Eldora; John Landers, Springfield, Mo.; C. M. Largent & Son, Merkel, Texas; La Vernet Stock Farm, Jackson, Miss.; G. E. Leslie Estate, Memphis, Mo.; Letts & Turkington, Letts; Thad. E. Mendenhall, Fairbury, Neb.; Wm. J. Niemeyer, West Point; W. A. Pickering, Belton, Mo.; Robert Rogers, Union; J. Wesley Sherwood, Knoxville; Kermit Sherwood, Knoxville; Quentine Stowe, Ackley; G. M. Scott & Son, Rea, Mo., Quiet Glenn Farm; L. J. Smith, 1016 Commerce Bldg., Kansas City, Mo.; Mary Jane Switzer, Independence, Mo.; Iver Thorsheine, Radcliffe; J. E. Thompson, Martinsville, Ill.; Terrace Lake Hereford Park, Live Stock Exch. Bldg., Kansas City, Mo.; Turner Lumber & Investment Co., Kansas City, Mo.; Roy Van Winkle, Webster City; Ed Wiese & Son, Manning; W. L. Yost, Independence, Mo.

JUDGE..............................C. P. SORENSON, Balaton, Minn.

Bull Three Years Old or Over ($75, $60, $50, $40, $30, $25, $20, $20, $15, $15)—First, E. M. Cassady & Son on Good Stanway 2nd 826598; second, O. Harris & Sons on Repeater 166th 743001; third, J. E. Thompson on Beau Fairfax 719972; fourth, Ferguson Bros. on Lowden Fairfax 807321; fifth, Heath & Pearson on Dandy Brae 16th 806421; sixth, John Landers on Laurel Repeater 875479; seventh, John Landers on King Repeater 2nd 823808; eighth, Turner Lumber & Investment Co. on Laurel Paragon 873591; ninth, P. M. Christenson on Dale Grove 820441; tenth, Hall Bros. on Rex Bullion 867642.

Bull Two Years Old and Under Three ($75, $60, $50, $40, $30, $25, $20, $20, $15, $15)—First, W. L. Yost on Gay Braemore 884100; second, Mary Jane Switzer on Perfect Dawn 914765; third, O. Harris & Sons on Repeater 266th 890891; fourth, O. Harris & Sons on Repeater 244th 862321; fifth, Jesse Engle & Son on Echo Lad 269th 898937; sixth, Turner Lumber and Investment Co. on Laurel Masterpiece 1003403; seventh, G. E. Leslie Estate on Lord Dandy 4th 886590; eighth, John Landers on Repeater Jr.'s Model 822922; ninth, Ferguson Bros. on Ellis Fairfax 880692; tenth, Roy Van Winkle on Hawkeye Mystic 890604.

Senior Yearling Bull ($75, $60, $50, $40, $30, $25, $20, $20, $15, $15)—First, W. L. Yost on Bonnies Impression 987571; second, C. M. Largent & Sons on Lovie's Lad 987389; third, O. Harris & Sons on Repeater 274th 985384; fourth, Turner Lumber & Investment Co. on Laurel Perfection 5th 989392; fifth, B. H. Bishop on Sir Dare 969479; sixth, J. E. Thompson on Royal Fairfax 8th 988704; seventh, Ferguson Bros. on Russell L. Fairfax 990241; eighth, Turner Lumber & Investment Co. on Laurel Perfection 3rd 989397; ninth, P. M. Christenson & Son on Miss Lark's Gem 980931; tenth, Ferguson Bros. on Wilbur Fairfax 990243.

Junior Yearling Bull ($75, $60, $50, $40, $30, $25, $20, $20, $20, $15, $15, $15, $15, $10, $10)—First, O. Harris' Sons on Repeater 283rd 985393; second, W. L. Yost on Bonnie's Image 987570; third, Jesse Engle & Son on Beau Blanchard 121st 995378; fourth, E. M. Cassady & Son on Domino Stanway 1011029; fifth, C. M. Largent & Son on Kleberg Lad 3rd 1009741;

sixth, John Landers on King Repeater 6th 1012302; seventh, Letts & Turkington on Standard Dare 1040117; eighth, E. M. Cassady & Son on Don Blanchard 1011030; ninth, Thad. E. Mendenhall on Imperial 2nd 993503; tenth, G. E. Leslie Estate on Woodford Prince 4th 1013928; eleventh, Wallace and E. G. Good on The Anxiety 9th 1003158; twelfth, Ferguson Bros. on Richard Fairfax 125th 1077196; thirteenth, Roy Van Winkle on Champion 5th 997262; fourteenth, Terrace Lake Hereford Park on Bean Best Jr. 1090000; fifteenth, John Landers on King Repeater 10th 1012306.

Senior Bull Calf ($75, $60, $50, $40, $30, $25, $20, $20, $20, $15, $15, $15, $15, $10, $10)—First, C. M. Largent & Sons on La Vernet Lad 1085642; second, Wallace and E. G. Good on Good Donald 42nd 1098929; third, Jesse Engle & Son on Beau Blanchard 130th 1064223; fourth, J. E. Thompson on Dale's Anxiety 1093101; fifth, Jesse Engle & Son on Beau Blanchard 133d 1092333; sixth, Turner Lumber & Investment Co. on Pride of Laurel 1096651; seventh, Ferguson Bros. on Richard Fairfax 129th; eighth, G. E. Leslie Estate on Woodford Prince 8th 1099017; ninth, Ed Wiese & Son on Rex Mischief Jr. 1083571; tenth, Letts & Turkington on Alton Incom 1088926; eleventh, Wm. J. Niemeyer on Springbrook Bud 1094356; twelfth, Letts & Turkington on Royal Incom 1088947; thirteenth, Thad. E. Mendenhall on Mischief Bond 1079589; fourteenth, G. E. Leslie Estate on Woodford Prince 10th 1099019; fifteenth, Wm. J. Niemeyer on Springbrook Dave 1094357.

Junior Bull Calf ($75, $60, $50, $40, $30, $25, $20, $20, $20, $15, $15, $15, $15, $10, $10)—First, W. L. Yost on Bonnie Brae 1094493; second, C. M. Largent & Sons on Samson Lad 1114871; third, O. Harris & Sons on Repeater 323rd 1103295; fourth, C. M. Largent & Sons on Garfield Lad 1114857; fifth, Jesse Engle & Son on Beau Blanchard 135th 1117060; sixth, Letts & Turkington on Healths Incom 1088938; seventh, O. Harris & Sons on Repeater 320th 1092489; eighth, Turner Lumber & Investment Co. on Laurel Conquerer 3rd; ninth, John Landers on King Repeater 15th 1092209; tenth, Ferguson Bros. on Richard Fairfax 133d; eleventh, Thad. E. Mendenhall on Imperials Image 1087604.

Cow Three Years Old or Over ($75, $60, $50, $40, $30, $25, $20, $20, $15, $15)—First, C. M. Largent & Sons on France Lassie 685274; second, Wallace & E. G. Good on Dora Donald 1044011; third, J. E. Thompson on Miss Gay Lad 2nd 785124; fourth, O. Harris & Sons on Echo Less 51st 584338; fifth, Jesse Engle & Son on Belle Blanchard 34th 623118; sixth, E. M. Cassady & Son on Niobe Stanway 768277; seventh, Ferguson Bros. on Lady Fairfax 663129; eighth, O. Harris & Sons on Miss Repeater 162d 763756; ninth, T. M. Hayden on Lola 2nd; tenth, B. H. Bishop on Bessie 563972.

Heifer Two Years Old and Under Three ($75, $60, $50, $40, $30, $25, $20, $20, $15, $15)—First, Jesse Engle & Son on Mischievous 4th; second, Ferguson Bros. on Fairfax Maid 9th 886205; third, C. M. Largent & Sons on Shadeland Jewel 5th 882938; fourth, Wallace and E. G. Good on Lady Donald 33rd 902654; fifth, J. E. Thompson on Lady Fairfax 904986; sixth, Heath & Pearson on Dandy Lass 11th 867865; seventh, O. Harris & Sons on Miss Repeater 210th 890885; eighth, E. M. Cassady & Son on Niobe Stanway 2nd 853257; ninth, P. M. Christenson & Son on Miss Donald Brae 942661; tenth, Hall Bros. on Hazel Richards 980297.

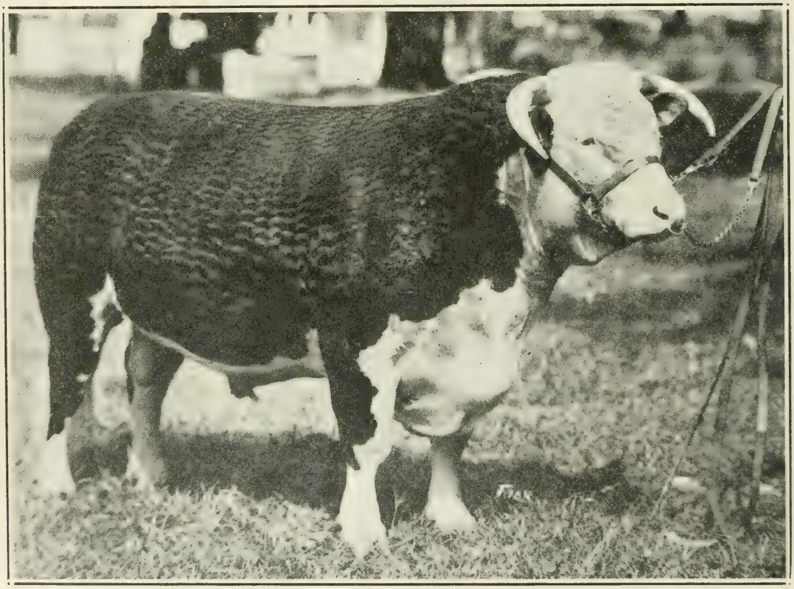
Senior Yearling Heifer ($75, $60, $50, $40, $30, $25, $20, $20, $20, $15, $15, $15, $15, $10, $10)—First, W. L. Yost on Bonnie Erling 987567; second, Wallace & E. G. Good on Mixers Princess 975317; third, Terrace Lake Hereford Park on Yule Tide 2d 969228; fourth, C. M. Largent & Sons on Shadeland Jewell 6th 987400; fifth, O. Harris & Sons on Miss Repeater 234th 985350; sixth, Turner Lumber & Investment Co. on Laurel Dorette 989388; seventh, O. Harris & Sons on Miss Repeater 254th 985369; eighth, Ed. Wiese & Son on Esther Mischief 988480; ninth, J. E. Thompson on Lady Fairfax 6th 988703; tenth, W. L. Yost on Bonnie Hampton 990184; eleventh, Heath & Pearson on Dandy Lass 16th 98407; twelfth, Letts & Turkington on Francis Incom 960063; thirteenth, Jesse Engle & Son on Belle Blanchard

108th 983535; fourteenth, Ferguson Bros. on Rosana Fairfax 950509; fifteenth, Jesse Engle & Son on Belle Blanchard 111th 983538.

Junior Yearling Heifer ($75, $60, $50, $40, $30, $25, $20, $20, $20, $15, $15, $15, $15, $10, $10)—First, Jesse Engle & Son on Belle Blanchard 112th 995379; second, W. L. Yost on Prim Lady 987598; third, Thad. E. Mendenhall on Empress Onie 1052539; fourth, W. L. Yost on Bonnie Tulip 987576; fifth, E. M. Cassady & Son on Donna Maude 1018655; sixth, O. Harris & Sons on Miss Repeater 264th 985379; seventh, C. M. Largent & Sons on Beauty Fairfax 4th 1009725; eighth, Turner Lumber & Investment Co. on Laurel Dorette 6th 1007820; ninth, Turner Lumber & Investment Co. on Laurel Dorette 5th 1007819; tenth, Ferguson Bros. on Fairfax Maid 17th 886205; eleventh, Terrace Lake Hereford Park on Donna Domino 1014785; twelfth, Wm. J. Niemeyer on Incomparable Rose 1004697; thirteenth, Letts & Turkington on Mildred Incom 998473; fourteenth, E. M. Cassady & Son on Donna L. 1011033; fifteenth, Heath and Pearson on Villisca Elect 24th 1044146.

Senior Heifer Calf ($75, $60, $50, $40, $30, $25, $20, $20, $20, $15, $15, $15, $15, $10, $10)—First, W. L. Yost on Bonnie Sunshine 1094496; second, Jesse Engle & Sons on Belle Blanchard 130th 1092330; third, Jesse Engle & Sons on Belle Blanchard 123d 1094906; fourth, O. Harris & Sons on Miss Gay Lad 175th 1090754; fifth, C. M. Largent & Sons on Lady Love 1114861; sixth, O. Harris & Sons on Miss Repeater 287th 1090761; seventh, C. M. Largent & Sons on Juliet Fairfax 2d 1085640; eighth, W. L. Yost on Maiden Blush 1094517; ninth, Turner Lumber & Investment Co. on Laurel Belle 4th 1096643; tenth, Letts & Turkington on Pauline Incom 1088943; eleventh, E. M. Cassady & Son on Donna Goldie 1087706; twelfth, G. E. Leslie Estate on Lady Dandy 5th 1099015; thirteenth, Thad. E. Mendenhall on Empress 1st 1079584; fourteenth, Wallace & E. G. Good on Dora Best 1096162; fifteenth, G. E. Leslie Estate on Annie Dandy 3rd 1099011.

Senior Champion Bull ($75)—W. L. Yost on Gay Braemore.



GAY BRAEMORE
Grand Champion Hereford Bull. W. L. Yost, Kansas City, Mo.

Junior Champion Bull ($75)—W. L. Yost on Bonnie's Impression.

Grand Champion Bull, Any Age ($75)—W. L. Yost on Gay Braemore.

Senior Champion Female ($75)—C. M. Largent & Son on France Lassie.

Junior Champion Female ($75)—W. L. Yost on Bonnie Erling.

Grand Champion Female, Any Age ($75)—C. M. Largent & Son on France Lassie.

Graded Herd ($90, $80, $75, $60, $50, $40, $30, $25, $20, $20)—First, Jesse Engle & Sons; second, E. M. Cassady & Son; third, O. Harris & Sons; fourth, O. Harris & Sons; fifth, Ferguson Bros.; sixth, J. E. Thompson; seventh, Wallace & E. G. Good; eighth, Heath & Pearson; ninth, Turner Lumber & Investment Co.; tenth, Roy Van Winkle.

Yearling Herd ($80, $70, $60, $50, $40, $30, $25, $20, $15, $10)—First, W. L. Yost; second, Jesse Engle & Son; third, O. Harris & Sons; fourth, E. M. Cassady & Son; fifth, C. M. Largent & Sons; sixth, W. L. Yost; seventh, Ferguson Bros.; eighth, Thad. E. Mendenhall; ninth, Terrace Lake Hereford Park; tenth, Letts & Turkington.

Calf Herd ($80, $70, $60, $50, $40, $30, $25, $20, $15, $10)—First, W. L. Yost; second, Jesse Engle & Son; third, C. M. Largent & Sons; fourth, Thad. E. Mendenhall; fifth, O. Harris & Sons; sixth, G. E. Leslie Estate; seventh, J. E. Thompson; eighth, Turner Lumber & Investment Co.; ninth, Terrace Lake Hereford Park; tenth, Letts & Turkington.

Get of Sire ($90, $80, $75, $60, $50, $40, $30, $25, $20, $20)—First, W. L. Yost; second, E. M. Cassady & Son; third, Jesse Engle & Son; fourth, O. Harris & Sons; fifth, W. L. Yost; sixth, C. M. Largent & Son; seventh, John Landers; eighth, Ferguson Bros.; ninth, Thad. E. Mendenhall; tenth, Letts & Turkington.

Three Bulls, Any Age, Owned by Exhibitor ($75, $60, $50, $40, $30, $25, $20, $20, $15, $15)—First, E. M. Cassady & Son; second, W. L. Yost; third, O. Harris & Sons; fourth, Jesse Engle & Son; fifth, C. M. Largent & Sons; sixth, Ferguson Bros.; seventh, J. E. Thompson; eighth, John Landers; ninth, Turner Lumber & Investment Co.; tenth, Letts & Turkington.

Two Bulls, Any Age, Bred and Owned by Exhibitor ($75, $60, $50, $40, $30, $25, $20, $20, $15, $15)—First, W. L. Yost; second, E. M. Cassady & Son; third, O. Harris & Sons; fourth, Jesse Engle & Sons; fifth, O. Harris & Sons; sixth, C. M. Largent & Son; seventh, W. L. Yost; eighth, C. M. Largent & Son; ninth, C. G. Leslie Estate; tenth, Letts & Turkington.

IOWA HEREFORD SPECIALS.

Bull Three Years Old or Over ($15, $12, $10, $10)—First, E. M. Cassady & Son on Good Stanway 2d 826598; second, Heath & Pearson on Dandy Brae 16th 806421; third, P. M. Christenson & Son on Dale Grove 820441; fourth, Hall Bros. on Rex Bullion 867642.

Bull Two Years, Under Three ($15, $12, $10, $10, $10)—First, Jesse Engle & Son on Echo Lad 269th 888937; second, Roy Van Winkle on Hawkeye Mystic 890604; third, Wm. J. Niemeyer on Beau Repeater 937459; fourth, B. H. Bishop on Dismoras Lad 2nd 876349; fifth, P. M. Christenson & Son on Dandy Brae 907294.

Bull, Senior Yearling ($15, $12, $10)—First, B. H. Bishop on Sir Brae 969479; second, P. M. Christenson & Son on Miss Lark's Gem 980931; third, B. H. Bishop on Dewey Dismora 988285.

Bull, Junior Yearling ($15, $12, $10, $10, $10, $8)—First, Jesse Engle & Son on Beau Blanchard 121 995378; second, E. M. Cassady & Son on Domino Stanway 1011029; third, Letts & Turkington on Standard Dare 1040117; fourth, E. M. Cassady & Son on Don Blanchard 1011030; fifth, Roy Van Winkle on Champion 5th 997262; sixth, Heath & Pearson on Dandy Brae 24th 1014228.

Bull, Senior Calf ($15, $12, $10, $10, $10, $8, $8)—First, Jesse Engle & Son on Beau Blanchard 130 1064223; second, Jesse Engle & Son on Beau Blanchard 133d 1092333; third, Ed Wiese & Son on Rex Mischief Jr.

1083571; fourth, Letts & Turkington on Alton Incom 1088926; fifth, Wm. J. Niemeyer on Springbrook Bud 1094356; sixth, Letts & Turkington on Royal Incom 1088947; seventh, Wm. J. Niemeyer on Springbrook Dove 1094357.

Bull, Junior Calf ($15, $12, $10, $10, $10, $8)—First, Jesse Engle & Son on Beau Blanchard 13th 1117060; second, Letts & Turkington on Heaths Incom 1088938; third, Ed Wiese & Son on Real Rex Mischief 1110914; fourth, Heath & Pearson on New Year's Gift, 1090515; fifth, P. M. Christenson & Son on Successful Grove; sixth, B. H. Bishop on Bishop's Bride 1115907.

Cow Three Years or Over ($15, $12, $10, $10, $10, $8, $8)—First, Jesse Engle & Son on Belle Blanchard 34th 623118; second, E. M. Cassady & Son on Niobe Stanway 768277; third, T. M. Hayden on Lola 2nd 781012; fourth, B. H. Bishop on Bessie 563972; fifth, Roy Van Winkle on Miss Beau Donald 712725; sixth, Heath & Pearson on Dandy Lass 809419; seventh, Wm. J. Niemeyer on Lucille 541248.

Heifer Two Years Old and Under Three ($15, $12, $10, $10, $10, $8, $8)—First, Jesse Engle & Son on Mischievous 4th; second, Heath & Peterson on Dandy Lass 11th 867865; third, E. M. Cassady & Son on Niobe Stanway 2nd 853257; fourth, P. M. Christenson & Son on Miss Donald Brae 942661; fifth, Hall Bros. on Hazel Richards 980297; sixth, Ed Wiese & Son on Loa's Mischief 883113; seventh, Heath & Peterson on Dandy Lass 15th 947119.

Heifer, Senior Yearling ($15, $12, $10, $10, $10, $8, $8)—First, Ed Wiese & Son on Esther Mischief 988480; second, Heath & Pearson on Dandy Lass 16th 984907; third, Letts & Turkington on Francis Incom 960663; fourth, Jesse Engle & Son on Belle Blanchard 108th 983535; fifth, Jesse Engle & Son on Bell Blanchard 111th 983538; sixth, Letts & Turkington on Ambert Incom 960055; seventh, Ed Wiese & Son on Sparkle Mischief 988485.

Heifer, Junior Yearling ($15, $12, $10, $10, $10, $8, $8)—First, Jesse Engle & Son on Belle Blanchard 112th 995379; second, E. M. Cassady & Son on Dona Maud 1018655; third, Wm. J. Niemeyer on Incomparable Rose 1004697; fourth, Letts & Turkington on Mildred Incom 998473; fifth, E. M. Cassady & Son on Donna L. 1011033; sixth, Heath & Pearson on Villisca Elect 24th 1044156; seventh, Heath & Pearson on Maples Bond Lass 1014299.

Heifer, Senior Calf ($15, $12, $10, $10, $10, $8, $8)—First, Jesse Engle & Son on Belle Blanchard 130th 1092330; second, Jesse Engle & Son on Belle Blanchard 123d 1094906; third, Letts & Turkington on Pauline Incom 1088943; fourth, E. M. Cassady & Son on Donna Goldie 1087706; fifth, Ed Wiese & Son on Madam Rex 11110913; sixth, Jesse Engle & Son on Belle Blanchard 131st 1117061; seventh, Wm. J. Niemeyer on Springbrook Pet 1094360.

ABERDEEN ANGUS.

EXHIBITORS—Leonard Abbe, Toledo; Frank Abbe, Toledo; Lawrence Aves, Melbourne; Darrel Bacon, Toledo; Matt Baker, Mitchellville; R. R. Blake & Sons, Dallas Center; Joseph Caputo, Marshalltown; Robert Collins, Liscomb; Bertha Donnen, Melbourne; Mary Donnen, Melbourne, Laura Dawson, Washta; Escher & Ryan, Irwin; John H. Fitch, Lake City; Ralph Freel, Runnells; R. W. Frank, Renwick; John H. Gibbons, North English; Russell Hayward, Dysart; Hess & Brown, Waterloo; Earl Houston, Tama; Carl Huston, Tama; Kemp Bros., Marion; W. A. Kirschbaum, Defiance; Earl Korns, Hartwick; Nelson Korns, Hartwick; P. J. Leahy, Parnell; Emery H. Lee, Avoca; A. G. Messer, Grundy Center; Orville Neville, Malcom; Clark Plummer, Marshalltown; Lester Plummer, Marshalltown; Carl E. Rosenfeld, Kelley; Virgil Sherwood, Hartwick; J. Garrett Tolan, Farmingdale, Ill.; C. W. Wurzbacker, Marion.

JUDGE.................................**A. C. BINNIE, Chester, Iowa.**

Bull Three Years Old or Over ($40, $30, $25, $20, $15, $10)—First, P. J. Leahy on Black Star Atlas 244282; second, Escher & Ryan on Blackcap Baton 283593; third, Carl E. Rosenfeld on Erona Dan 281886; fourth, John H. Gibbons on Everwise of G. 2nd 3006008; fifth, J. Garrett Tolan on Eileenmere 4th 251504; sixth, W. A. Kirschbaum on Elation K 283793.

Bull Two Years Old, Under Three ($40, $30, $25, $20, $15, $10)—First, Escher & Ryan on Black Marshall 5th 321834; second, John H. Fitch on Besto 302443; third, R. R. Blake & Sons on Sensation 'B" 320651; fourth, P. J. Leahy on Electo 2nd 334372; fifth, Hess & Brown on Eckland 2d of Quietdale 318947; sixth, Roy W. Frank on Edor 2nd 342002.

Senior Yearling Bull ($40, $30, $25, $20, $15)—First, Kemp Bros. on Black Belmore 336163; second, Hess & Brown on Bertrand of Quietdale 329884; third, Carl E. Rosenfeld on Elixir Earl 333418; fourth, J. Garrett Tolan on Estimation 331760; fifth, Emery H. Lee on Blackcap Ed.

Junior Yearling Bull ($40, $30, $25, $20, $15, $15, $10, $10, $10, $10)—First, Carl E. Rosenfeld on Eventuation 337989; second, Kemp Bros. on Berman of Glenrock 331306; third, A. G. Messer on Blackcap Briand 352286; fourth, P. J. Leahy on Elberson 2d 340178; fifth, R. W. Frank on Estaban 342007; sixth, J. Garrett Tolan on Tar Baby C. 328917; seventh, John H. Fitch on Blackcap Burtis 344323; eighth, A. G. Messer on Ennet B. 352288; ninth, A. G. Messer on Blue Capper 338324; tenth, Orville Neville on Black Beston 349454.

Senior Bull Calf ($40, $30, $25, $20, $15, $15, $10, $10, $10, $10)—First, P. J. Leahy on Banbridge; second. Escher & Ryan on Evolution Marshall 351893; third, Escher & Ryan on Evolution Marshall 351891; fourth, John H. Fitch on Entiner 344344; fifth, A. G. Messer on Black Bellen 353125; sixth, J. Garrett Tolan on Permit 9th 352761; seventh, Escher & Ryan on Earl Marshall 5th 351890; eighth, Escher & Ryan on King Marshall; ninth, A. G. Messer on Quimbus M. 353123; tenth, R. R. Blake & Sons on Pridmere.

Junior Bull Calf ($40, $30, $25, $20, $15, $15, $10)—First, Escher & Ryan on Blackcap Marshall 10th 351903; second, R. W. Frank on Estonians Equal 351433; third, A. G. Messer on Black Baron B. 2nd 353134; fourth, Carl E. Rosenfeld on Electron 352610; fifth, Kemp Bros. on Berman of Glenrock 2nd; sixth, J. Garrett Tolan on Blackcapmere 2nd 352765; seventh, P. J. Leahy on Erdmann.

Cow Three Years Old or Over ($40, $30, $25, $20, $15, $10)—First, Escher & Ryan on Barbara Brownell 3rd 273206; second, John H. Fitch on Black Violet Bonnie 231554; third, Hess & Brown on Edifice of Laggan 8th 263157; fourth, R. R. Blake & Sons on Blackbird of Dallas 220257; fifth, Carl E. Rosenfeld on Barbara Beeh 202473; sixth, P. J. Leahy on Glenmede Blackbird 21st 235646.

Heifer Two Years Old and Under Three ($40, $30, $25, $20, $15, $10)—First, Hess & Brown on Blackbird of Quietdale 92 318955; second, Kemp Bros. on Queen's Viola K. 306800; third, Escher & Ryan on Pride Protest 6th 321847; fourth, R. W. Frank on Erica Enlate 336529; fifth, J. Garrett Tolan on Enchanteffie 294067; sixth, Escher & Ryan on Barbara McHenry 36th 321853.

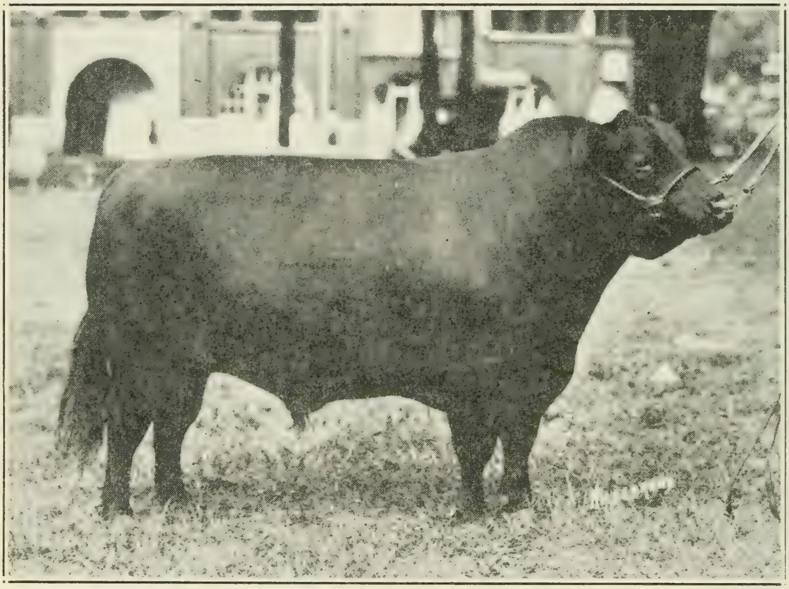
Senior Yearling Heifer ($40, $30, $25, $20, $15, $10)—First, John H. Fitch on Queen Quixie 329755; second, Escher & Ryan on Pride Protest 7th 336532; third, Hess & Brown on Blackcap of Quietdale 13 329878; fourth, R. W. Frank on Ethelda; fifth, Escher & Ryan on Erica Energy 12th 336531; sixth, J. Garrett Tolan on Purda 5th 331758.

Junior Yearling Heifer ($40, $30, $25, $20, $15, $15, $10, $10, $10, $10)—First, Carl E. Rosenfeld on Blackbird Berite 337990; second, Carl E. Rosenfeld on Melba 338103; third, Carl E. Rosenfeld on Blackcap McHenry 156th 352606; fourth, Hess & Brown on Elopsis of Quietdale 4th 329886; fifth, R. W. Frank on Esther Blackbird 342297; sixth, Emery H. Lee on Enviette; seventh, A. G. Messer on Blackbird 22 of Cedmer 338325; eighth, John H. Fitch on Prentice Pride 329761; ninth, A. G. Messer on Bluecap Lady 338326; tenth, P. J. Leahy on Edlan.

Senior Heifer Calf ($40, $30, $25, $20, $15, $15, $10, $10, $10, $10)—First, A. G. Messer on Black Eyes of Cedmer 353124; second, Escher & Ryan on Barbara McHenry 39th 351895; third, R. W. Frank on Elva; fourth, J. Garrett Tolan on Mihaley 352762; fifth, A. G. Messer on Blackbird Ena 353130; sixth, Escher & Ryan on Erica Energy 16th 351892; seventh, Carl E. Rosenfeld on Blackbird Jimmy 3rd 352609; eighth, P. J. Leahy on Exinyes; ninth, John H. Fitch on Evadell 344325; tenth, Carl E. Rosenfeld on Evea 352607.

Senior Champion Bull ($35)—Escher & Ryan on Black Marshall 5th 321834.

Junior Champion Bull ($35)—Carl A. Rosenfeld on Eventuation 337989.



BLACK MARSHALL 5th
Grand Champion Angus Bull. Escher & Ryan, Irwin, Iowa.

Grand Champion Bull, Any Age ($35)—Escher & Ryan on Black Marshall 5th 321834.

Senior Champion Female ($35)—Hess & Brown on Black Bird of Quietdale 92d 318955.

Junior Champion Female ($35)—Carl E. Rosenfeld on Blackbird Bestie 337990.

Grand Champion Female, Any Age ($35)—Hess & Brown on Blackbird of Quietdale 92d 318955.

Graded Herd ($50, $40, $30, $25, $20, $15)—First, Escher & Ryan; second, P. J. Leahy; third, John H. Fitch; fourth, Carl E. Rosenfeld; fifth, Hess & Brown; sixth, J. Garrett Tolan.

Yearling Herd ($40, $35, $30, $25, $20, $15)—First, Carl E. Rosenfeld; second, Hess & Brown; third, John H. Fitch; fourth, Kemp Bros.; fifth, A. G. Messer; sixth, P. J. Leahy.

Calf Herd ($40, $35, $30, $25, $20, $15)—First, Escher & Ryan; second, A. G. Messer; third, P. J. Leahy; fourth, Escher & Ryan; fifth, John H. Fitch; sixth, R. W. Frank.

Get of Sire ($50, $40, $35, $25, $20, $15)—First, Escher & Ryan; second, Carl E. Rosenfeld; third, A. G. Messer; fourth, R. W. Frank; fifth, P. J. Leahy; sixth, Escher & Ryan.

Three Bulls, Any Age, Owned by Exhibitor ($40, $35, $30, $25, $20, $15)—First, Escher & Ryan; second, P. J. Leahy; third, Carl E. Rosenfeld; fourth, John H. Fitch; fifth, Kemp Bros.; sixth, Hess & Brown.

Two Bulls, Any Age, Bred and Owned by Exhibitor ($40, $30, $25, $25, $20, $15)—First, Escher & Ryan; second, Hess & Brown; third, Carl E. Rosenfeld; fourth, R. R. Blake & Sons; fifth, P. J. Leahy; sixth, John H. Fitch.

POLLED SHORTHORNS.

EXHIBITORS—S. B. Hudson & Son, Knoxville; P. C. and J. J. Knudson, Grundy Center; Leeman Stock Farm, Hoopston, Ill.; Lloyd Loonan, Waterloo; S. W. Stewart & Son, Kennard, Neb.; H. C. Stork, Tekamah, Neb.; Wahl Bros., St. Olaf.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Bull Three Years Old or Over ($20, $15, $10, $8, $5)—First, Leeman Stock Farm on Ceremonies Sultan 17402; second, S. W. Stewart & Son on Belles Lavender 2113; third, Wahls Bros. on Royal Villager x20220; fourth, S. B. Hudson & Son on Amity Champion 14613; fifth, Nelson Bros. on Uneeda Count x22901.

Bull Two Years Old and Under Three ($20, $15)—First, Wahls Bros. on Royal Knight 2d x22347; second, Lloyd Loonan on Scotch Loch Dale Jr. x24276.

Senior Yearling Bull ($20)—First, Lloyd Loonan on Scotch Dale Leader.

Junior Yearling Bull ($20, $15, $10—First, Leeman Stock Farm on Ceremonious Lord 1083074; second, Leeman Stock Farm on Lee Dale Type 24292; third, S. W. Stewart & Son on Bell Boy 25164.

Senior Bull Calf ($20, $15, $10, $8, $5)—First, Leeman Stock Farm on Ceremonious Count; second, Lloyd Loonan on Scotty Type; third, Wahls Bros. on Craibstone Villager x25126; fourth, Wahls Bros. on Rosebud Villager x25128; fifth, S. B. Hudson & Son on Mint Master 2d.

Junior Bull Calf ($20, $15)—First, S. W. Stewart & Son on Long Lavender 25165; second, Lloyd Loonan on Royal Dale.

Cow Three Years Old or Over ($20, $15, $10, $8, $6)—First, Leeman Stock Farm on Lee Dale Mayflower 3rd x4600; second, Wahls Bros. on Royal Jenny x6930; third, S. W. Stewart & Son on Artful Lassie 4397; fourth, S. B. Hudson & Son on Duchess of Gloster 82d; fifth, Lloyd Loonan on Roany Royal x2688.

Heifer Two Years Old and Under Three ($20, $15, $10, $8, $6)—First, S. B. Hudson & Son on Lady Lois 12865; second, Leeman Stock Farms on Queen of Scots x11567; third, S. W. Stewart & Son on Rouald Elizabeth 9549; fourth, S. W. Stewart & Son on Royal Belle 9548; fifth, Leeman Stock Farm on Lee Dale Rosemary 3rd x11562.

Senior Yearling Heifer ($20, $15, $10, $8, $5)—First, S. W. Stewart & Son on Royal Cowslip 11709; second, Leeman Stock Farm on Ceremonious Queen x13174; third, S. B. Hudson & Son on Highland Belle 12864; fourth, S. B. Hudson & Son on Modest Lady 12866; fifth, Lloyd Loonan on Scotch Dale Minorca.

Junior Yearling Heifer ($20, $15, $10, $8, $5)—First, S. W. Stewart & Son on Artful Lass 11801; second, S. W. Stewart & Son on Lavender Rose 1069188; third, Leeman Stock Farm on Ceremonious Maid x13173; fourth, Lloyd Loonan on Scotch Dale Flower; fifth, Z. T. Dunham & Sons on Mollie 14049.

Senior Heifer Calf ($20, $15, $10, $8, $5)—First, Wahls Bros. on Village Blossom x14302; second, Leeman Stock Farm on Ceremonious Rose; third, Lloyd Loonan on 69th Dutchess of Gloster; fourth, S. W. Stewart & Son on Cowslip Royal 14357; fifth, Lloyd Loonan on Minorca Junior.

Senior Champion Bull ($5)—Leeman Stock Farm on Ceremonious Sultan.

Junior Champion Bull ($5)—S. W. Stewart & Son on Long Lavender.

Grand Champion Bull, Any Age ($10)—Leeman Stock Farm on Ceremonious Sultan.

Senior Champion Female ($5)—Leeman Stock Farm on Lee Dae Mayflower.

Junior Champion Female ($5)—S. W. Stewart & Son on Royal Cowslip.

Grand Champion Female, Any Age ($10)—Leeman Stock Farm on Lee Dae Mayflower.

Graded Herd ($25, $20, $15, $10)—First, Leeman Stock Farm; second, S. W. Stewart & Son; third, Wahls Bros.; fourth, S. B. Hudson & Son.

Yearling Herd ($25, $20, $15)—First, S. W. Stewart & Son; second, Leeman Stock Farm; third, Lloyd Loonan.

Calf Herd ($25, $20, $15)—First, Lloyd Loonan; second, Leeman Stock Farm; third, S. W. Stewart & Son.

Get of Sire ($25, $20, $15, $10)—First, Leeman Stock Farm; second, S. W. Stewart & Son; third, Leeman Stock Farm; fourth, S. W. Stewart & Son.

Three Bulls, Any Age, Owned by Exhibitor ($25, $20, $15, $10)—First, Leeman Stock Farm; second, S. W. Stewart & Son; third, Wahls Bros.· fourth, Lloyd Loonan.

Two Bulls, Any Age, Bred and Owned by Exhibitor ($25, $20, $15, $10)—First, Leeman Stock Farm; second, S. W. Stewart & Son; third, Lloyd Loonan; fourth, Lloyd Loonan.

RED POLLED.

EXHIBITORS—J. F. Gilbert, Earlham; Geo. Haussler & Sons, Holbrook, Neb.; J. W. Larabee, Earlville, Ill.; Paul C. Larson & Son, Wolbach, Neb.; H. P. Olson, Altona, Ill.; L. J. Palas, St. Olaf; Roger Van Evera, Davenport.

JUDGE.................................**A. P. ARP, Eldridge, Iowa.**

Bull Three Years Old and Over ($25, $18, $14)—First, Geo. Haussler & Sons on National Type 37498; second, Paul C. Larsen & Son on Royal Dude 31735; third, L. J. Palas on Stone Wall Robert 38095.

Bull Two Years Old and Under Three ($25, $18, $14, $10)—First, L. J. Palas on Rebina's Marham 40142; second, I. W. Larabee on Harry Charmer 40346; third, Roger Van Evera on Enterprise 39840; fourth, H. P. Olson on Corporal 41246.

Senior Yearling Bull ($25, $18, $14)—First, Roger Van Evera on Elgin 41496; second, L. J. Palas on Stone Wall Sailor 42335; third, H. P. Olson on William Charmer 42201.

Junior Yearling Bull ($25, $18, $14, $10)—First, J. W. Larabee on Teddy's Boy 42206; second, Geo. Haussler & Sons on Willie Charmer 43501; third, Paul C. Larsen & Son on Fae 42229; fourth, Roger Van Evera on Amy's Imperial.

Senior Bull Calf ($25, $18, $14, $10, $5)—First, L. J. Palas on S. W. Dafter 43985; second, Geo. Haussler & Sons on Ideal Beau 43880; third, H. P. Olson on Great Teddy 43845; fourth, L. J. Palas on S. W. St. Paul 43951; fifth, Geo. Haussler & Sons on Ideal Leader 43879.

Junior Bull Calf ($25, $18, $14, $10, $5)—First, J. W. Larabee on Cyrus Charmer 43919; second, Geo. Haussler & Sons on Ideal's Charmer 43932; third, Paul C. Larsen & Son on Radio Royal 43863; fourth, H. P. Olson on Charmer Boy 43983; fifth, L. J. Palas on S. W. Marham's Guard 43956.

Cow Three Years Old or Over ($25, $18, $14, $10, $5)—First, L. J. Palas on Sally 44562; second, J. W. Larabee on Lady Neckton 44743; third, H. P.

Olson on Queen Luna 55406; fourth, Paul C. Larsen & Son on Lorraine Dude 52440; fifth, Geo. Haussler & Sons on N. Mable 46118.

Heifer Two Years Old, Under Three ($25, $18, $14, $10, $5)—First, Geo. Haussler & Sons on U. Ruby Rose 3rd 55701; second, J. W. Larabee on Clara 56952; third, Geo. Haussler & Sons on U. Lady Netta 2nd 58479; fourth, L. J. Palas on Selma 57271; fifth, Roger Van Evera on Etta 56296.

Senior Yearling Heifer ($25, $18, $14, $10, $5)—First, Geo. Haussler & Sons on U. Dortha 3rd 58479; second, J. W. Larabee on Winnie Charmer 59352; third, Paul C. Larsen on Sheba 59170; fourth, L. J. Palas on Delvina 59522; fifth, Roger Van Evera on Aleda's Sunbeam 2nd 58361.

Junior Yearling Heifer ($25, $18, $14, $10, $5)—First, Geo. Haussler & Sons on U. Mockingbird 59255; second, Paul C. Larsen & Son on Margaret Lassie 59172; third, J. W. Larabee on Tulip Charmer 59363; fourth, H. P. Olson on Lady Marham 61119; fifth, Geo. Haussler & Sons on Upland Topsy Girl 59929.

Senior Heifer Calf ($25, $18, $14, $10, $5)—First, H. P. Olson on Leona Charmer 61819; second, Geo. Haussler & Sons on Upland Susie Ann 61867; third, J. W. Larabee on Belva Charmer 61934; fourth, Paul C. Larsen & Son on O. K. Blossom 61799; fifth, L. J. Palas on S. W. Show Girl 61973.

Senior Champion Bull ($10)—L. J. Palas on Rebina's Marham.

Junior Champion Bull ($10)—J. W. Larabee on Teddy's Boy.

Grand Champion Bull, Any Age ($10)—J. W. Larabee on Teddy's Boy.

Senior Champion Female ($10)—L. J. Palas on Sally.

Junior Champion Female ($10)—Geo. Haussler & Son on U. Dorotha 3rd.

Grand Champion Female, Any Age ($10)—L. J. Palas on Sally.

Graded Herd ($30, $25, $20, $15, $10)—First, Geo. Haussler & Sons; second, L. J. Palas; third, J. W. Larabee; fourth, Paul C. Larsen & Son; fifth, Roger Van Evera.

Yearling Herd ($25, $20, $18, $14, $10)—First, J. W. Larabee; second, Geo. Haussler & Sons; third, Roger Van Evera; fourth, L. J. Palas; fifth, Paul C. Larsen & Son.

Calf Herd ($25, $20, $18, $14)—First, Geo. Haussler & Sons; second, L. J. Palas; third, H. P. Olson; fourth, Paul C. Larsen & Son.

Get of Sire ($30, $25, $20, $15, $10)—First, Geo. Haussler & Sons; second, J. W. Larabee; third, Paul C. Larsen & Son; fourth, Roger Van Evera; fifth, Geo. Haussler & Sons.

Three Bulls, Any Age, Owned by Exhibitor ($25, $20, $18, $14, $10)—First, J. W. Larabee; second, Geo. Haussler & Sons; third, Paul C. Larsen & Son; fourth, L. J. Palas; fifth, Roger Van Evera.

Two Bulls, Any Age, Owned by Exhibitor ($25, $20, $18, $14, $10)—First, J. W. Larabee; second, Geo. Haussler & Sons; third, L. J. Palas; fourth, J. W. Larabee; fifth, Roger Van Evera.

IOWA RED POLLED SPECIALS.

Bull Three Years Old or Over ($10)—First, L. J. Palas on Stone Wall Robert 38095.

Bull Two Years Old and Under Three ($10, $8)—First, L. J. Palas on Rebina's Marham 40142; second, Roger Van Evera on Enterprise 39840.

Bull, Senior Yearling ($10, $8)—First, Robert Van Evera on Elgin 41496; second, L. J. Palas on Stone Wall Sailor 42335.

Bull, Junior Yearling ($10)—First, Roger Van Evera on Amyi Imperial.

Bull, Senior Calf ($10, $8, $6)—First, L. J. Palas on S. W. Dafter 43985; second, L. J. Palas on S. W. St. Paul 43951; third, Roger Van Evera on Adair.

Bull, Junior Calf ($10)—First, L. J. Palas on S. W. Marham's Guard 43956.

Cow Three Years Old or Over ($10, $8, $6)—First, L. J. Palas on Sally 44562; second, L. J. Palas on Dazzle 44563; third, Roger Van Evera on Easter Duchess 50144.

Heifer Two Years Old and Under Three ($10, $8, $6, $4)—First, L. J. Palas on Selma 57271; second, Roger Van Evera on Etta 56296; third, L. J. Palas on Sabina 58265; fourth, Roger Van Evera on Molly 56295.

Heifer, Senior Yearling ($10, $8, $6, $4)—First, L. J. Palas on Delivina 59522; second, Roger Van Evera on Alda's Sunbeam 22d 59361; third, L. J. Palas on Dolly 59523; fourth, Roger Van Evera on Esther 58362.

Heifer, Junior Yearling ($10, $8)—First, J. F. Gilbert on Prue 60958; second, Roger Van Evera on Isabelle 58374.

Heifer, Senior Calf ($10, $8, $6)—First, L. J. Palas on S. W. Show Girl 61973; second, L. J. Palas on S. W. Sheba 61970; third, Roger Van Evera on Betty.

GALLOWAY.

EXHIBITORS—H. Croft, Anthony, Kans.; H. L. Fluke, Bath, S. D.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Bull Three Years Old or Over ($15, $10, $8)—First, H. L. Fluke on Carlota's Cornot 44729; second, H. Croft on Idol Worthy 46509; third, H. Croft on Mendota 43138.

Bull Two Years Old and Under Three ($15, $10, $8)—First, H. L. Fluke on Cornot Jr. 46203; second, H. Croft on Haida's Optimist 46114; third, H. Croft on Helen's Othello 46415.

Senior Yearling Bull ($15, $10)—First, H. Croft on Carnot of M. L. 47416; second, H. L. Fluke on King Cornot 47910.

Junior Yearling Bull ($15, $10, $8, $5)—First, H. L. Fluke on Ben Cornot 47904; second, H. Croft on John of M. L. 47418; third, H. L. Fluke on Fred Cornot 47904; fourth, H. Croft on Jo of M. L. 47420.

Senior Bull Calf ($15, $10)—First, H. L. Fluke on Tri State Wonder 48528; second, H. Croft on Jim of M. L. 48291.

Junior Bull Calf ($15, $10)—First, H. L. Fluke on Andy of F. F. 48525; second, H. Croft on Bob of M. L. 48390.

Cow Three Years Old or Over ($15, $10, $8)—First, H. L. Fluke on Carolota of M. L. 45987; second, H. Croft on Clara Cola 46408; third, H. Croft on Ora of M. L. 43441.

Heifer, Two Years Old and Under Three ($15, $10)—First, H. Croft on Cora Cola 47541; second, H. L. Fluke on Lady Florence of F. F. 47905.

Senior Yearling Heifer ($15, $10)—First, H. L. Fluke on Fern of F. F. 47900; second, H. Croft on Bell of M. L. 47133.

Junior Yearling Heifer ($15, $10)—First, H. L. Fluke on Juanita of F. F. 47898; second, H. Croft on Pearl of M. L. 47341.

Senior Heifer Calf ($15, $10, $8, $5)—First, H. L. Fluke on Min of F. F. 48531; second, H. Croft on Nellie of M. L. 49361; third, H. L. Fluke on Ina May of F. F. 48532; fourth, H. Croft on May of M. L. 49362.

Senior Champion Bull ($5)—H. L. Fluke on Carlota's Cornot.

Junior Champion Bull ($5)—H. L. Fluke on Ben Cornot.

Grand Champion Bull, Any Age ($10)—H. L. Fluke on Carlota's Cornot.

Senior Champion Female ($5)—H. L. Fluke on Carlota of M. L.

Junior Champion Female ($5)—H. L. Fluke on Min of F. F.

Grand Champion Female, Any Age ($10)—H. L. Fluke on Carlota of M. L.

Graded Herd ($20, $15)—First, H. L. Fluke; second, H. Croft.

Yearling Herd ($20, $15)—First, H. L. Fluke; second, H. Croft.

Calf Herd ($20, $15, $10)—First, H. L. Fluke; second, H. Croft; third, H. L. Fluke.

Get of Sire ($20, $15, $10)—First, H. L. Fluke; second, H. L. Fluke; third, H. Croft.

Three Bulls, Any Age, Owned by Exhibitor ($18, $15, $8)—First, H. L. Fluke; second, H. L. Fluke; third, H. Croft.

Two Bulls, Any Age, Bred and Owned by Exhibitor ($18, $15, $8)—First, H. L. Fluke; second, H. Croft; third, H. L. Fluke.

HOLSTEINS.

EXHIBITORS—Garrie R. Bishop; Board of Control, State Institution, Anamosa; Board of Control, State Institution, Cherokee; Board of Control, State Institution, Clarinda; Board of Control, State Institution, Eldora; Board of Control, State Institution, Independence; Board of Control, State Institution, Mt. Pleasant; Board of Control, State Institution, Woodward; Cerro Gordo Farms, Mason City; E. J. Erickson, Cambridge; Hargrove & Arnold, Norwalk; Iowana Farms, Davenport; H. O. Larsen, Dike; E. H. Maytag, Newton; Union College, College View, Neb.

JUDGE............................J. B. IRWIN, Minneapolis, Minn.

Bull Four Years or Over ($25, $20, $15, $10)—First, Corwin Farms on King Korndyke Sadie Vale Pietertje 212333; second, Board of Control, Mt. Pleasant on Wolfspring Sethje Mooie Pontiac H. B. 182020; third, H. O. Larsen on Sir Ragapple Pasch; fourth, Board of Control, Independence, on Colantha Wayne Ormsby 239246.

Bull Three Years Old and Under Four ($25, $20, $15)—First, Hargrove & Arnold on King Ormsby Piebe Mercedes 260943; second, Iowana Farms on Iowana Star Fayne 254441; third, Union College on King Pontiac Champion Polkadot 310081.

Bull Two Years Old and Under Three ($25, $20, $15, $10)—First, Board of Control, Independence, on Cherokee Cornucopia 315020; second, Hargrove & Arnold on King Pietertje Ormsby Piebe Tidy 296379; third, Iowana Farms on Iowana Coronis Fryslan 313732; fourth, Board of Control, Clarinda, Violet Ormsby Wayne 347901.

Bull One Year Old and Under Two ($25, $20, $15, $10, $8, $5)—First. Hargrove & Arnold on King Pieterjte Ormsby Piebe Jewel 368392; second. Iowana Farms on Burke Mercedes Star 342917; third, Cerro Gordo Farms on King Pietertje Ormsby Piebe 29th 355211; fourth, C. W. Patti on Walker Ormsby Piebe 369908; fifth, Iowana Farms on Burke Mercedes Star 342919; sixth, Corwin Farms on Corwin Wimple De kol Ormsby.

Bull, Senior Calf ($20, $18, $15, $10, $8, $5)—First, Hargrove & Arnold on King Banostine Ormsby Piebe 369910; second, Board of Control, Cherokee, on Cherokee Nudine Piebe; third, H. O. Larsen on Forum Ormsbv Superior; fourth, Board of Control, Clarinda, Clarinda Pietertje Korndyke Ormsby; fifth, E. H. Maytag on Pietertje Pontiac Ormsby Ilona 377984; sixth, Union College on King Netherland Segis Alcarta 381268.

Cow Four Years Old or Over ($25, $20, $15, $10, $8)—First, Iowana Farms on Iowana Fayne Star 414850; second, H. O. Larsen on Forum Diamond Homestead 523846; third, Board of Control, Woodward, on Lady Daphne Pambytuning; fourth, Board of Control, Cherokee, on Diana Cornucopia 330791; fifth, Union College on Miss Sarah Netherland De Kol 344151.

Cow Three Years Old and Under Four ($25, $20, $15, $10)—First, Board of Control, Clarinda, on Beaver Oaks Prilly Mercedes 551838; second, Hargrove & Arnold on Miss Ormsby Jewel 462793; third, Iowana Farms on Iowana Homestead De Cola 488677; fourth, Board of Control, Clarinda, on Madam Pambytuning Pontiac 577103.

Heifer Two Years Old and Under Three ($25, $20, $15, $10, $8)—First, Board of Control, Mt. Pleasant, on Mt. Pleasant Prilly La Polka 545238;

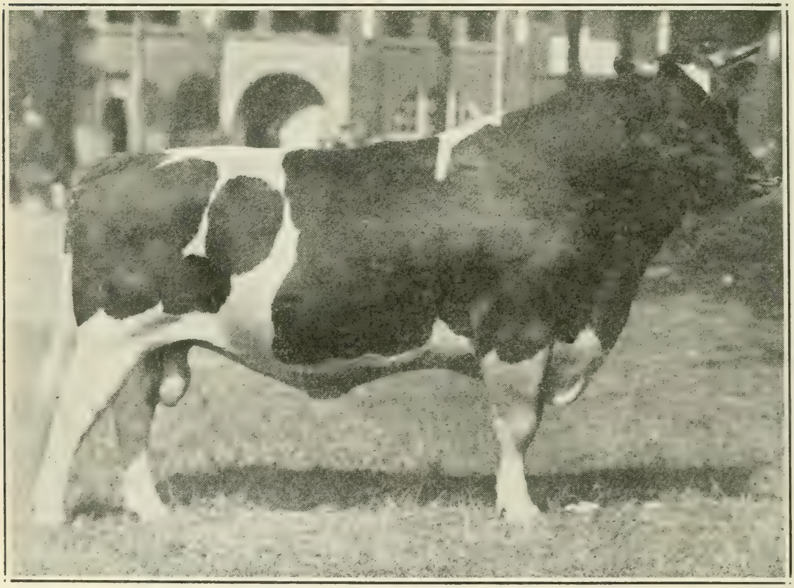
second, Hargrove & Arnold on Sunny Lady 3rd 544163; third, H. O. Larsen on Forum Pontiac Queen 644377; fourth, Hargrove & Arnold on Miss Alexina Ormsby 587334; fifth, Board of Control, Cherokee on Cherokee Nudine Ann 674704.

Heifer, Senior Yearling ($20, $18, $15, $10, $8, $7, $6)—First, Corwin Farms on Corwin Colantha Florence Ormsby; second, Corwin Farms on Corwin K. S. P. Mabel Ormsby; third, Corwin Farms on Corwin Beauty Tobes Ormsby; fourth, Arnold Hargrove on Martha Ormsby Piebe 614259; fifth, Iowana Farms on Homestead Veeman 2nd 629282; sixth, Iowana Farms on Iowana Fayne Bettina 2nd 629278; seventh, Board of Control, Clarinda, on Daisy Walker Tobes Ormsby 679112.

Heifer, Junior Yearling ($20, $18, $15, $10, $8, $7, $6)—First, Hargrove & Arnold on Dorothy Ormsby Piebe 657732; second, Iowana Farms on Iowana Farms Hope 661939; third, Iowana Farms on Iowana Fayne Jessie 3rd 661942; fourth, Union College on C. K. S. A. Abbehuk Alcartia 677504; fifth, Union College on C. K. S. A. Chippewa De Kol 707464; sixth, E. J. Erickson on Colantha Belle Korndyke 4th 675949; seventh, Board of Control, Mt. Pleasant, Nudine Korndyke Mt. Pleasant 681540.

Heifer, Senior Calf ($20, $18, $15, $10, $8, $7, $6)—First, Iowana Farms on Iowana One Star Pietertje 706695; second, Board of Control, Clarinda, Clarinda Daisy Walker Ormsby 759213; third, Hargrove & Arnold on Truine Ormsby Rose 704214; fourth, Board of Control, Clarinda, on Clarinda Celia Pietertje Ormsby; fifth, Hargrove & Arnold on Pube Artis Burke 737964; sixth, Board of Control, Clarinda, on Clarinda Aaggie Duchess Ormsby 759214; seventh, Board of Control, Clarinda on Clarinda Moose Fayne Ormsby 759212.

Senior Champion Bull ($10)—Corwin Farms on King Korndyke Sadie Vale Pietertje 212333.



KING KORNDYKE SADIE VAL PIETERTJE
Grand Champion Holstein Bull. Corwin Farms, Rock Valley, Iowa.

Junior Champion Bull ($10)—Hargrove & Arnold on King Pietertje Ormsby Piebe Jewel 368392.

Grand Champion Bull, Any Age ($15)—Corwin Farms on King Korndyke Sadie Vale Pietertje 212333.

Senior Champion Female ($10)—Iowana Farms on Iowana Fayne Star 414850.

Junior Champion Female ($10)—Hargrove & Arnold on Dorothy Ormsby Piebe 647732.

Grand Champion Female, Any Age ($15)—Hargrove & Arnold on Dorothy Ormsby Piebe 647732.

Graded Herd ($25, $20, $15, $10, $8, $5)—First, Hargrove & Arnold; second, Corwin Farms; third, H. O. Larsen; fourth, Iowana Farms; fifth, Board of Control, Clarinda; sixth, Board of Control, Mt. Pleasant.

Yearling Herd ($25, $20, $15, $10, $8, $5)—First, Hargrove & Arnold; second, Corwin Farms; third, Iowana Farms; fourth, Union College; fifth, Iowana Farms; sixth, E. J. Erickson.

Breeders Calf Herd ($25, $20, $15, $10, $8, $5)—First, Hargrove & Arnold; second Board of Control, Clarinda; third, H. O. Larsen; fourth, Corwin Farms; fifth, Iowana Farms; sixth, Board of Control, Cherokee.

Get of Sire ($25, $20, $15, $10, $8, $5)—First, Hargrove & Arnold; second, Corwin Farms; third, Hargrove & Arnold; fourth, Board of Control, Clarinda; fifth, Iowana Farms; sixth, Union College.

Produce of Cow ($25, $20, $15, $10, $8, $5)—First, Iowana Farms; second, Hargrove & Arnold; third, Board of Control, Woodward; fourth, Board of Control, Cherokee; fifth, Union College; sixth, H. O. Larsen.

DIPLOMAS.

Premier Exhibitor (Diploma)—Hargrove & Arnold.

Premier Breeder (Diploma)—Iowana Farms.

IOWA HOLSTEIN SPECIALS.

Bull Four Years Old or Over ($15, $12, $10, $10, $8)—First, Corwin Farms on King Korndyke Sadie Vale Pietertje 212333; second, Board of Control, Mt. Pleasant, on Wolfspring Sethje Mooie Pontiac H. B. 182020; third, H. O. Larsen on Sir Ragapple Pasch; fourth, Board of Control, Independence on Colantha Wayne Ormsby 239246; fifth, Carrie R. Bishop on King Johanna Bonheur Champion 137723.

Bull Three Years Old and Under Four ($15, $12)—First, Hargrove & Arnold on King Ormsby Piebe Mercedes 260943; second, Iowana Farms on Iowana Star Fayne 254441.

Bull Two Years Old and Under Three ($15, $12, $10, $10, $8)—First, Board of Control, Independence, on Cherokee Cornucopia 315020; second, Hargrove & Arnold on King Pietertje Ormsby Piebe Tidy 296379; third, Iowana Farms on Iowana Cornis Fryslan 313732; fourth, Board of Control, Clarinda on Violet Ormsby Wayne 347901; fifth, Corwin Farms on Triume Ormsby Piebe 294182.

Bull One Year Old and Under Two ($15, $12, $10, $10, $8, $5)—First, Hargrove & Arnold on King Pietertje Ormsby Jewel 368392; second, Iowana Farms on Burke Mercedes Star 342917; third, Cerro Gordo Farms on King Pietertje Ormsby Piebe 29th 355211; fourth, C. W. Patti on Walker Ormsby Piebe 349908; fifth, Iowana Farms on Iowana Echo Star 342919; sixth, Corwin Farms on Corwin Wimple DeKol Ormsby.

Bull, Senior Calf ($15, $12, $10, $8, $5)—First, Hargrove & Arnold on King Banostine Ormsby Piebe 369910; second, Board of Control, Cherokee, on Cherokee Nudine Piebe; third, H. O. Larsen on Forum Ormsby Superior; fourth, Board of Control, Clarinda, on Clarinda Pietertje Korndyke Ormsby 381165; fifth, E. H. Maytag on Pietertje Pontica Ormsby Ilona, 377984 sixth, C. W. Patti on King Rex Mercedes 374284.

Cow Three Years Old or Over ($15, $12, $10, $10, $8, $5)—First, Iowana Farms on Iowana Fayne Star 414850; second, Board of Control, Clarinda, on Beaver Oates Prilly Mercedes 551838; third, H. O. Larsen on Forum Diamond Homestead 523846; fourth, Hargrove & Arnold on Miss Ormsby Jewel 462793; fifth, Board of Control, Woodward, on Lady Daphne Pambytuning; sixth, Iowana Farms on Iowana Homestead De Cola 488677.

Heifer Two Years Old and Under Three ($15, $12, $10, $10, $8, $5)—First, Board of Control, Mt. Pleasant, on Mt. Pleasant Prilly La Polka 545238; second, Hargrove & Arnold on Sunny Lady 3rd 544163; third, H. O. Larsen on Forum Pontiac Queen 644377; fourth, Hargrove & Arnold on Miss Alexina Ormsby 587334; fifth, Board of Control, Cherokee, on Cherokee Nudine Ann 674704; sixth, H. O. Larsen on Forum Maud Masterpiece 597788.

Heifer, Senior Yearling ($15, $12, $10, $10, $8, $5, $5)—First, Corwin Farms on Corwin Colantha Florence Ormsby; second, Corwin Farms on Corwin K. S. P. Mable Ormsby; third, Corwin Farms on Corwin Beauty Tobes Ormsby; fourth, Hargrove & Arnold on Martha Ormsby Piebe 614259; fifth, Iowana Farms on Iowana Homestead Veeman 2nd 629282; sixth, Iowana Farms on Iowana Fayne Bettina 2nd 629278; seventh, Board of Control, Clarinda, on Daisy Walker Fobes Ormsby 679112.

Heifer, Junior Yearling ($15, $12, $10, $10, $8)—First, Hargrove & Arnold on Dorothy Ormsby Piebe 647732; second, Iowana Farms on Iowana Farms Hope 661939; third, Iowana Farms on Iowana Fayne Jessie 3rd 661942; fourth, E. J. Erickson on Colantha Bell Korndyke 4th 675949; fifth, Board of Control, Mt. Pleasant, on Nudine Korndyke Mt. Pleasant, 681540.

Heifer, Senior Calf ($15, $12, $10, $10, $8, $5, $5)—First, Iowana Farms on Iowana One Star Pietertje 706695; second, Board of Control, Clarinda, on Clarinda Daisy Walker Ormsby 759213; third, Hargrove & Arnold on Triune Ormsby Rose 704214; fourth, Board of Control, Clarinda, on Clarinda Celia Pietertje Ormsby; fifth, Hargrove & Arnold on Pieve Artis Burke 737964; sixth, Board of Control, Clarinda, on Clarinda Aaggie Duchess Ormsby 759214; seventh, Board of Control, Clarinda, on Clarinda Moore Fayne Ormsby 759212.

JERSEY.

EXHIBITORS—W. J. Campbell, Jesup; Wm. Stuart Goble, 1125 Douglas Ave., Des Moines; Meredith Jersey Farm, Des Moines; A. D. Ralston, Macon, Mo.; C. A. Reinheimer, Marion; H. S. Stein, Ft. Madison; G. C. Sterling, 31st and Darley St., Des Moines; Waterloo Jersey Farm, Waterloo.

JUDGE.................................R. T. LEE, Waterloo, Iowa.

Bull Four Years Old or Over ($25, $20, $15, $10)—First, Meredith Jersey Farm on Financial Beauty's King 132904; second, A. D. Ralston on Fern's Noble Champion 149771; third, C. A. Reinheimer on Ibsen's Golden Price 128319; fourth, Harry S. Stein on Iowa Discount 142403.

Bull Two Years Old and Under Three ($25, $20)—First, Campbell Jersey Farms on You'll Do Bobbie 191967; second, Waterloo Jersey Farm on Financial Countess King 186047.

Bull One Year Old and Under Two ($25, $20, $15, $10, $8, $5)—First, Meredith Jersey Farm on Financial Successful King 200772; second, Waterloo Jersey Farm on Financial Bonnie Sans Alois 199516; third, Campbell Jersey Farm on You'll Do Financial King 200957; fourth, Waterloo Jersey Farm on Financial Winner 202404; fifth, C. A. Reinheimer on Grand View You'll Do 201338; sixth, Meredith Jersey Farm on Financial King Brookhill 200226.

Bull, Senior Calf ($20, $18, $15, $10, $8, $5)—First, Campbell Jersey Farm on Combination You'll Do Jr. 208520; second, Waterloo Jersey Farm on Financial Merman 205573; third, Waterloo Jersey Farm on Financial Sensation Count 206334; fourth, Meredith Jersey Farm on Successful Emancipator 207373; fifth, Waterloo Jersey Farm on Financial Superior King 206497; sixth, Campbell Jersey Farm on You'll Do Sea Lad 208522.

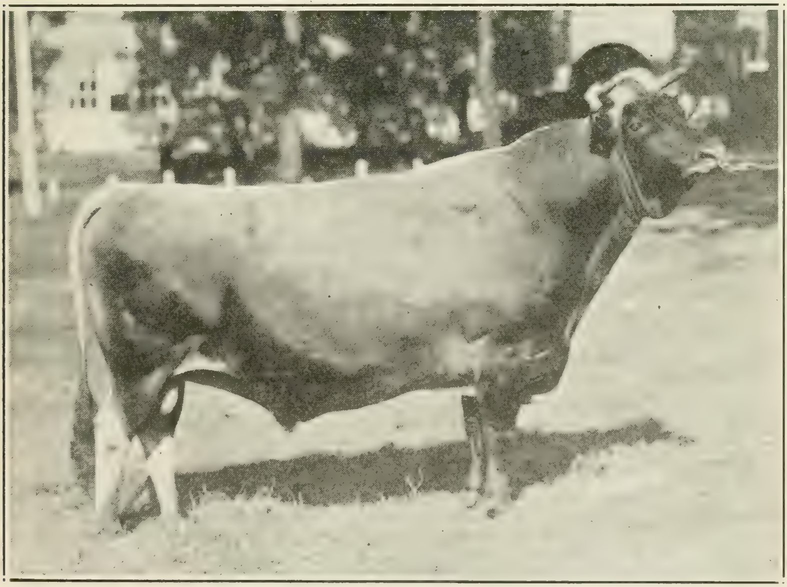
Cow Four Years Old or Over ($25, $20, $15, $10, $8)—First, Meredith Jersey Farm on Etta Brookhill 421700; second, Meredith Jersey Farm on Owletena of Roycroft 454153; third, Campbell Jersey Farm on You'll Do Myrtle 460304; fourth, Waterloo Jersey Farm on Financial Countess Topsy 381790; fifth, Meredith Jersey Farm on Financial Noble Viola 333664.

Cow Three Years Old and Under Four ($25, $20, $15, $10)—First, Waterloo Jersey Farm on Financial Francene 441895; second, Meredith Jersey Farm on Financial Fern Sultane 478365; third, Harry S. Stein on Merridale's Perfection Lady 462332; fourth, C. A. Reinheimer on Fair Martha's Princess 435328.

Heifer Two Years Old and Under Three ($25, $20, $15, $10, $8)—First, A. D. Ralston on You'll Do's May Queen 484934; second, A. D. Ralston on Champion Noble May 511969; third, Meredith Jersey Farm on Ogima's Babe of Cloverland 516082; fourth, C. A. Reinheimer on Golden Princess's Princess 512557; fifth, Campbell Jersey arm on You'll Do Lady Lucy 552552.

Heifer, Senior Yearling ($20, $18, $15, $10, $8, $7, $6)—First, C. A. Reinheimer on Ibsen's Princess 512558; second, Meredith Jersey Farm on Financial Successful Rose 528398; third, Campbell Jersey Farm on Combination Pretty Lady 524652; fourth, Waterloo Jersey Farm on Financial S. Francene 509048; fifth, Campbell Jersey Farm on You'll Do Miss Virginia 510352; sixth, Meredith Jersey Farm on Financial Successful Girl 520735; seventh, A. D. Ralston on Champion Noble May 521802.

Heifer, Junior Yearling ($20, $18, $15, $10, $8, $7, $5)—First, Campbell Jersey Farm on You'll Do Lady June 521265; second, Meredith Jersey Farm on Golden Maid's Rose; third, Waterloo Jersey Farm on Financial Beauty Browny 523014; fourth, Campbell Jersey Farm on You'll Do Lady



FINANCIAL BEAUTY'S KING

Grand Champion Jersey Bull. Meredith Jersey Farm, Des Moines, Iowa.

Myrtle 521264; fifth, A. D. Ralston on Gold Medal Miss Primm; sixth, Meredith Jersey Farm on Pearl of Brookhill; seventh, Harry S. Stein on Merry Maiden's Noel's Ruth 536634.

Heifer, Senior Calf ($20, $18, $15, $10, $8, $7, $6)—First, Waterloo Jersey Farm on Financial Fancy Buttercup 541903; second, Campbell Jersey Farm on You'll Do Juanita 543330; third, Meredith Jersey Farm on Successful Golden Cowslip; fourth, C. A. Reinheimer on Grand View Martha 543114; fifth, Meredith Jersey Farm on Successful Lavender Girl; sixth, Waterloo Jersey Farm on Financial Exquisite 3rd 535285; seventh, Harry S. Stein on Ad's Iowa Doll 544596.

Senior Champion Bull ($10)—Meredith Jersey Farm on Financial Beauty's King 132904.

Junior Champion Bull ($10)—Campbell Jersey Farm on Combination You'll Do Jo 208520.

Grand Champion Bull, Any Age ($15)—Meredith Jersey Farm on Financial Beauty's King 132904.

Senior Champion Female ($10)—Waterloo Jersey Farm on Financial Francene 441895.

Junior Champion Female ($10)—Waterloo Jersey Farm on Financial Fancy Buttercup 541903.

Grand Champion Female, Any Age ($15)—Waterloo Jersey Farm on Financial Francene 441895.

Graded Herd ($25, $20, $15, $10, $8)—First, Meredith Jersey Farm; second, Waterloo Jersey Farm; third, Campbell Jersey Farm; fourth, C. A. Reinheimer; fifth, Harry S. Stein.

Yearling Herd ($25, $20, $15, $10, $8, $5)—First, Campbell Jersey Farm; second, Waterloo Jersey Farm; third, Meredith Jersey Farm; fourth, C. A. Reinheimer; fifth, A. D. Ralston; sixth, Campbell Jersey Farm.

Breeders' Calf Herd ($25, $20, $15, $10, $8)—First, Campbell Jersey Farm; second, Waterloo Jersey Farm; third, Meredith Jersey Farm; fourth, Waterloo Jersey Farm; fifth, Harry S. Stein.

Get of Sire ($25, $20, $15, $10, $8, $5)—First, Waterloo Jersey Farm; second, Campbell Jersey Farm; third, Meredith Jersey Farm; fourth, Campbell Jersey Farm; fifth, A. D. Ralston; sixth, C. A. Reinheimer.

Produce of Cow ($25, $20, $15, $10, $8, $5—First, Campbell Jersey Farm; second, Campbell Jersey Farm; third, Meredith Jersey Farm; fourth, C. A. Reinheimer; fifth, Harry S. Stein; sixth, C. A. Reinheimer.

DIPLOMAS.

Premier Exhibitor (Diploma)—Meredith Jersey Farm.

Premier Breeder (Diploma)—Waterloo Jersey Farm.

IOWA JERSEY SPECIALS.

Bull Four Years or Over ($15, $12, $10)—First, Meredith Jersey Farm on Financial Beauty King 132904; second, C. A. Reinheimer on Ibsen's Golden Prince 128319; third, Harry S. Stein on Iowa's Discount 142403.

Bull Two Years Old or Under Three ($15, $12)—First, Campbell Jersey Farm on You'll Do Bobbis 191967; second, Waterloo Jersey Farm on Financial Countess King 186047.

Bull One Year Old and Under Two ($15, $12, $10, $10, $8, $5)—First, Meredith Jersey Farm on Financial Successful King 200772; second, Waterloo Jersey Farm on Financial Bonnie Sans Aloi 199516; third, Campbell Jersey Farm on You'll Do Financial King 200957; fourth, Waterloo Jersey Farm on Financial Winner 202404; fifth, C. A. Reinheimer on Grand View You'll Do 201338; sixth, Meredith Jersey Farm on Financial King Brookhill 200226.

Bull, Senior Calf ($15, $12, $10, $10, $8, $5)—First, Campbell Jersey Farm on Combination You'll Do 208520; second, Waterloo Jersey Farm on Merman

205573; third, Waterloo Jersey Farm on Financial Sensation's Count 206334; fourth, Meredith Jersey Farm on Successful Emancipator 207373; fifth, Waterloo Jersey Farm on Financial Superior King 206497; sixth, Campbell Jersey Farm on You'll Do Sea Lad 208522.

Cow Three Years or Over ($15, $12, $10, $10, $8, $5)—First, Waterloo Jersey Farm on Financial Francene 441895; second, Meredith Jersey Farm on Etta Brookhill 421700; third, Meredith Jersey Farm on Owletena of Roy Croft 454153; fourth, Meredith Jersey Farm on Financial Fern Sultane 478365; fifth, Campbell Jersey Farm on You'll Do's Myrtle 460304; sixth, Waterloo Jersey Farm on Financial Countess Topsy 381790.

Heifer Two Years Old and Under Three ($15, $12, $10, $10, $8, $5)—First, Meredith Jersey Farm on Ogima's Babe of Cloverland 516082; second, C. A. Reinheimer on Golden Princess' Princess 512557; third, Campbell Jersey Farm on You'll Do Lady Lucy 522552; fourth, Waterloo Jersey Farm on Financial Sans Aloi Goldie 484630; fifth, Campbell Jersey Farm on You'll Do Lora 493281; sixth, Harry S. Stein on Jolly Lucile's Lucy 474343.

Heifer, Senior Yearling ($15, $12, $10, $10, $8, $5)—First, C. A. Reinheimer on Ibsen's Princess 512558; second, Meredith Jersey Farm on Financial Successful Rose 528398; third, Campbell Jersey Farm on Combination Pretty Lady 524652; fourth, Waterloo Jersey Farm on Financial S. Francene 509048; fifth, Campbell Jersey Farm on You'll Do Miss Virginia 510352; sixth, Meredith Jersey Farm on Financial Successful Girl 520735;

Heifer, Junior Yearling ($15, $12, $10, $10, $8, $5, $5)—First, Campbell Jersey Farm on You'll Do Lady June 521265; second, Meredith Jersey Farm on Golden Maid's Rose; third, Waterloo Jersey Farm on Financial Beauty Browny 523014; fourth, Campbell Jersey Farm on You'll Do Lady Myrtle 521264; fifth, Meredith Jersey Farm on Pearl of Brookhill; sixth, Harry S. Stein on Merry Maiden's Noel's Ruth 536634; seventh, Harry S. Stein on Maiden's Eurylia Countess 536635.

Heifer, Senior Calf ($15, $12, $10, $10, $8, $5, $5)—First, Waterloo Jersey Farm on Financial Fancy Buttercup 541903; second, Campbell Jersey Farm on You'll Do Juanita 543330; third, Meredith Jersey Farm on Successful Golden Cowslip; fourth, C. A. Reinheimer on Grand View Martha 543114; fifth, Meredith Jersey Farm on Success Lavender Girl; sixth, Waterloo Jersey Farm on Financial Exquisite 3rd 535285; seventh, Harry S. Stein on Cid's Iowa Doll 544596.

GUERNSEYS.

EXHIBITORS—J. H. Beckert, Albia; Rita Bradley, Altoona; Ellen Louise Burnett, Des Moines; Burnett & Brown, Des Moines; Marie Burkhead, Des Moines; Dwight Cofield, Des Moines; Compson Bros., Valley Junction, Iowa; Robert E. Coppock, West Branch; Dairyland Farm, Storm Lake; W. W. Marsh, Waterloo; Marydale Farm, Albia; Clare J. Minetor, Altoona; Salome Minetor, Altoona; Mountain Bros., Des Moines; Marple Mountain, Des Moines; E. S. Person, Minot, S. D.; Robert Sharon, Valley Junction; Paul Wilcox, Des Moines.

JUDGE.............................L. V. WILSON, St. Paul, Minn.

Bull Four Years Old or Over ($25)—First, E. S. Persons on May Rose Golden Secret 34920.

Bull Three Years Old and Under Four ($25, $20)—First, Dairyland Farm on Ultra's Royal of Edge Mere 52784; second, Robert E. Coppock on Penwyn of Birchwood 55261.

Bull Two Years Old and Under Three ($25)—First, Burnett & Brown on Lydias Express of Iowanola 63498.

Bull One Year Old and Under Two ($25, $20, $15, $10)—First, W. W. Marsh on May Rose Cherub 70934; second, Marydale Farm on Marydale Dood Phinney 73282; third, Paul Wilcox on Junior of Dewalt 68981; fourth, E. S. Person on Rivals King of Verndale 76071.

Bull, Senior Calf ($25, $18, $15, $10, $8, $5)—First, Mountain Bros. on Kitchener's Defiance Iowanola 77545; second, W. W. Marsh on Golden Day of the Prairie; third, Marydale Farm on Marydale Nora's Cherub 80158; fourth, W. W. Marsh on Cherub's Dictator of the Prairie 80060; fifth, E. S. Person on Violet's Rex of Minot 79816; sixth, Marydale Farm on Marydale Duke 80159.

Cow Four Years Old or Over ($25, $20, $15)—First, W. W. Marsh on Jeanette of the Prairie 2nd 69685; second, E. S. Person on May Rose Clara of Minot 86109; third, E. S. Person on May Rose Violet of Minot 86110.

Cow Three Years Old and Under Four ($25, $20)—First, E. S. Person on May Rose Betinna of Minot 93515; second, Marydale Farm on Nancy of Forest Lodge 40381.

Heifer Two Years Old and Under Three ($25, $20, $15, $10, $8)—First, E. S. Person on May Rose Glory of Minot 103973; second, Compton Bros. on Florindas Best 108602; third, E. S. Person on Lura Betinna of Minot 107067; fourth, Marydale Farm on Hoges Heiress of Forest Lodge 40381; fifth, Compton Bros. on Marydale Jerburg Marie 110252.

Heifer, Senior Yearling ($20, $18, $15, $10, $8, $7, $6)—First, W. W. Marsh on Admiration of the Prairie 117699; second, W. W. Marsh on Fox Glove of the Prairie 117698; third, Marydale Farm on Marydale Nan 118172; fourth, W. W. Marsh on Perfection of the Prairie 112661; fifth, Marydale Farm on Marydale Roxy 119821; sixth, E. S. Person on Glencoe of Minot 120293; seventh, E. S. Person on Auricle of Minot 120292.

Heifer, Junior Yearling ($20, $18, $15, $10, $8, $7, $6)—First, W. W. Marsh on Cherry Ripe of the Prairie 124401; second, Burnett & Brown on Miss Dohlia of Dewalt 121401; third, Rita Bradley on Bovina of Sunnyside 123039; fourth, Robert Sharon on Garnet's Juliette 126033; fifth, Marple Mountain on Golden Chene Beauty of Hawthorne 123398; sixth, Dwight Cofield on Tillybardin's Blue Belle 119317; seventh, Marie Burkhead on Lake Shore Amy.

Heifer, Senior Calf ($20, $18, $15, $10, $8, $7, $6)—First, W. W. Marsh on Honey Sweet of the Prairie 131883; second, Mountain Bros. on Cherub's Marigold of Iowanola 127167; third, W. W. Marsh on Cherry Bird of the Prairie 131884; fourth, W. W. Marsh on True May Rose of the Prairie 128508; fifth, E. S. Person on Alice of Minot 131034; sixth, Marydale Farm on Marydale Nelle; seventh, Marydale Farm on Marydale Marjorie 131535.

Senior Champion Bull ($10)—Burnett & Brown on Lydia's Express of Iowanola 63498.

Junior Champion Bull ($10)—W. W. Marsh on May Rose Cherub 70934.

Grand Champion Bull, Any Age ($15)—W. W. Marsh on May Rose Cherub 70934.

Senior Champion Female ($10)—W. W. Marsh on Jeanette of the Prairie 2nd 69685.

Junior Champion Female ($10)—W. W. Marsh on Honey Sweet of the Prairie 131883.

Grand Champion Female, Any Age ($15)—W. W. Marsh on Jeanette of the Prairie 2nd 69685.

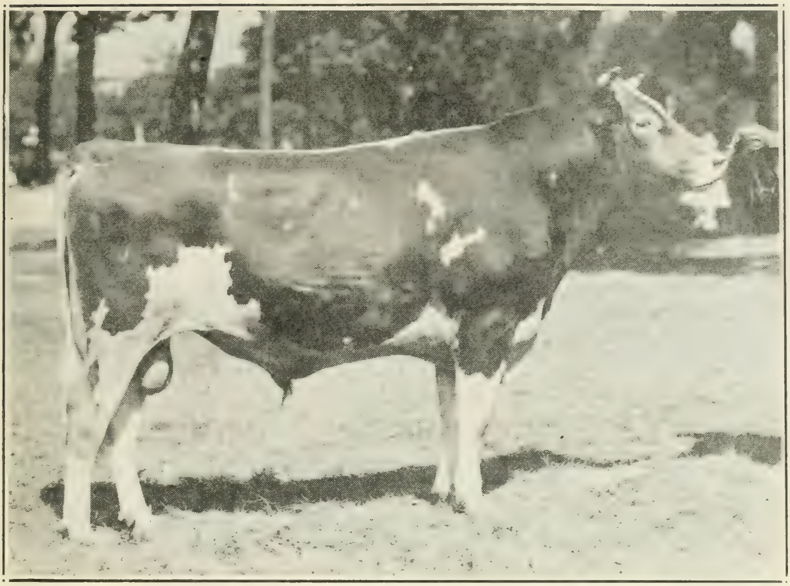
Graded Herd ($25)—First, E. S. Person.

Yearling Herd ($25, $20, $15)—First, W. W. Marsh; second, Marydale Farm; third, E. S. Person.

Breeders Calf Herd ($25, $20, $15, $10, $8)—First, Mountain Bros.; second, Marydale Farm; third, W. W. Marsh; fourth, W. W. Marsh; fifth, E. S. Person.

Get of Sire (25, $20, $15, $10, $8, $5)—First, W. W. Marsh; second, Marydale Farm; third, W. W. Marsh; fourth, Marydale Farm; fifth, E. S. Person; sixth, E. S. Person.

Produce of Cow ($25, $20, $15, $10)—First, Marydale Farm; second, E. S. Person; third, E. S. Person; fourth, Marydale Farm.



MAY ROSE CHERUB
Grand Champion Guernsey Bull. W. W. Marsh, Waterloo, Iowa.

DIPLOMAS.

Premier Exhibitor (Diploma)—W. W. Marsh.

Premier Breeder (Diploma)—W. W. Marsh.

IOWA GUERNSEY SPECIALS

Bull Three Years Old and Under Four ($15, $12)—First, Dairyland Farm on Ultra's Royal of Edgemere 52784; second, Robert E. Coppock on Penwyn of Birchwood 55261.

Bull Two Years Old and Under Three ($15)—First, Burnett & Brown on Lydia's Express of Iowanola 63498.

Bull One Year Old and Under Two ($15, $12, $10)—First, W. W. Marsh on May Rose Cherub 70934; second, Marydale Farm on Marydale Dood Phinney 73282; third, Paul Wilcox on Junior of De Walt 68981.

Bull, Senior Calf ($15, $12, $10, $10, $8, $5)—First, Mountain Bros. on Kitchener's Defiance of Iowanola 77545; second, W. W. Marsh on Golden Day of the Prairie; third, Marydale Farm on Marydale Nora's Cherub 80158; fourth, W. W. Marsh on Cherub's Dictator of the Prairie 109008; fifth, Marydale Farm on Marydale Duke 80159; sixth, Clare J. Minetor on Jedetta's Kitchener's Riduna 80435.

Cow Three Years or Over ($15, $12)—First, W. W. Marsh on Jeanette of the Prairie 2nd 69685; second, Marydale Farm on Nancy of Forest Lodge 40381.

Heifer Two Years Old and Under Three ($15, $12, $10, $10)—First, Compton Bros. on Florinda's 108602; second, Marydale Farm on Hayes Heiress of Forest Lodge 40381; third, Compton Bros. on Marydale Jerburg Marie 110252; fourth, Burnett & Brown on Edith S of Dewalt 112337.

Heifer, Senior Yearling ($15, $12, $10, $10, $8, $5, $5)—First, W. W. Marsh on Admiration of the Prairie 117699; second, W. W. Marsh on Fox Glove of the Prairie 117698; third, Marydale Farm on Marydale Nan 118172; fourth, W. W. Marsh on Perfection of the prairie 112661; fifth, Marydale Farm on Marydale Roxy 119821; sixth, Marydale Farm on Marydale Nita 118173; seventh, Robert E. Coppock on Quincy of Quakerknoll 112712.

Heifer, Junior Yearling ($15, $12, $10, $10, $8, $5, $5)—First, W. W. Marsh on Cherry Ripe of the Prairie 124401; second, Compton Bros. on Miss Dahlin of Dewalt 121401; third, Rita Bradley on Bovina of Sunnyside 123039; fourth, Robert Sharon on Garnet's Juliette 126033; fifth, Marple Mountain on Golden Chene Beauty of Hawthorne 123398; sixth, Dwight Cofield on Tillybardin's Blue Belle 119317; seventh, Marie Burkhead on Lake Shore Amy.

Heifer, Senior Calf ($15, $12, $10, $10, $8, $5, $5)—First, W. W. Marsh on Honey Sweet of the Prairie 131883; second, Mountain Bros. on Cherub's Marigold of Iowanola 127167; third, W. W. Marsh on Cherry Bird of the Prairie 131884; fourth, W. W. Marsh on True May Rose of the Prairie 128508; fifth, Marydale Farm on Marydale Nelle; sixth, Marydale Farm on Marydale Marjorie 131535; seventh, Mountain Bros. on Lady's Queen of Iowanola 127166.

AYRSHIRES.

EXHIBITORS—F. H. Baskins, Cedar Falls; Adam Seitz & Sons, Waukesha, Wis.; B. B. Simmons & Sons, Pewaukee, Wis.

JUDGE.................................C. B. FINLEY, Ames, Iowa.

Bull Four Years Old or Over ($20)—First, F. H. Baskins on Netherall Finlayston 22527.

Bull Two Years Old and Under Three ($20, $15)—First, B. B. Simmons & Sons on Cavalier The Last 25865; second, F. H. Baskins on Netherall Rising Star 24092.

Bull One Year Old and Under Two ($20, $15, $10)—First, B. B. Simmons & Sons on Ayrcroft Cavalier Goldfinder 26216; second, B. B. Simmons & Sons on Ayrcroft Cavalier Peter 26927; third, F. H. Baskins on Masterpiece 26650.

Bull, Senior Calf ($18, $15, $10)—First, B. B. Simmons & Sons on Ayrcroft Lad 27586; second, F. H. Baskins on Cavaliers Freetrader 24438; third, F. H. Baskins on Northland Model 27440.

Cow Four Years Old or Over ($20, $15, $10)—First, B. B. Simmons & Sons on Alta Croft 4th of Spring City 46581; second, B. B. Simmons & Sons on Kathleen Girl 51968; third, F. H. Baskins on Sylva Good Gift 43327.

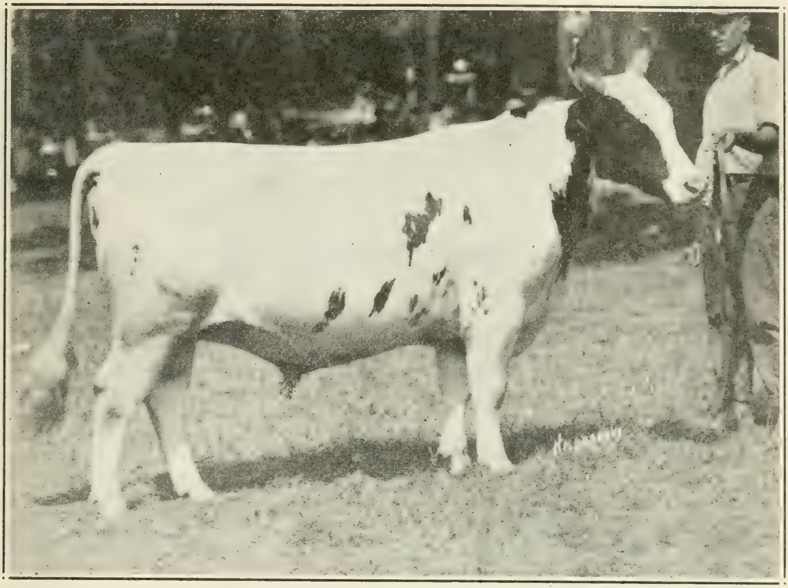
Cow Three Years Old, Under Four ($20, $15)—First, B. B. Simmons & Sons on Cavaliers Snow Ball 56069; second, F. H. Baskins on Daisy Avon 56169.

Heifer Two Years Old and Under Three ($20, $15, $10)—First, B. B. Simmons & Sons on Ayrcroft Ethel Rose 66315; second, F. H. Baskins on Rosalia Freetrader 63984; third, F. H. Baskins on Cavaliers Lady Beauty 60836.

Heifer, Senior Yearling ($18, $15, $10, $7)—First, B. B. Simmons & Sons on Spring City Sunflower 70833; second, B. B. Simmons & Sons on Ayrcroft Alta Croft 66317; third, F. H. Baskins on Mae Kilnford 66188; fourth, F. H. Baskins on Lady Alice Avon 2d 66190.

Heifer, Junior Yearling ($18, $15)—First, B. B. Simmons & Sons on Ayrcroft Lillie 67893; second, B. B. Simmons & Sons on Ayrcroft Ethel 67892.

Heifer, Senior Calf ($18, $15, $10, $7)—First, B. B. Simmons & Sons on Ayrcroft Lady Beauty 70296; second, B. B. Simmons & Sons on Ayrcroft Kirsty A 72538; third, B. B. Simmons & Sons on Ayrcroft Snowball 70295; fourth, F. H. Baskins on Snowhurst Nellie 2d 71914.



CAVALIER THE LAST
Grand Champion Ayrshire Bull. Simmons & Sons, Pewaukee, Wis.

Senior Champion Bull ($10)—B. B. Simmons & Sons on Cavalier The Last 25865.

Junior Champion Bull ($10)—B. B. Simmons & Sons on Ayrcroft Cavaliers Goldfinder 26216.

Grand Champion Bull, Any Age ($10)—B. B. Simmons & Sons on Cavalier The Last 25865.

Senior Champion Female ($10)—B. B. Simmons & Sons on Alta Croft 4th of Spring City 46581.

Junior Female Champion ($10)—B. B. Simmons on Spring City Sunflower 70833.

Grand Champion Female, Any Age ($10)—B. B. Simmons & Sons on Alta Croft 4th of Spring City 46581.

Graded Herd ($25, $15, $10)—First, B. B. Simmons & Sons; second, F. H. Baskins; third, F. H. Baskins.

Yearling Herd ($25, $15)—First, B. B. Simmons & Sons; second, F. H. Baskins.

Breeders' Calf Herd ($25, $15, $10)—First, B. B. Simmons & Sons; second, F. H. Baskins; third, F. H. Baskins.

Get of Sire ($25, $15, $10, $5)—First, B. B. Simmons & Sons; second, B. B. Simmons & Sons; third, F. H. Baskins; fourth, F. H. Baskins.

Produce of Cow ($25, $15, $10, $5)—First, B. B. Simmons & Sons; second, B. B. Simmons & Sons; third, F. H. Baskins; fourth, F. H. Baskins.

Premier Exhibitor (Diploma)—B. B. Simmons & Sons.

Premier Breeder (Diploma)—B. B. Simmons & Sons.

FAT CATTLE SECTION.

FAT SHORTHORNS.

EXHIBITORS—Glen Aikman, Gray; Eugene Alexander, Indianola; Glen Anderson, Stanton; Orville W. Bergren, Stanton; Frank Berry, Prole; Harold Burkhardt, Guthrie Center; Kenneth Burkhardt, Guthrie Center; Leland Bower, South English; Edward Barrogy, Rockwell; Frank Bottger, Ollie; Marion Cahill, Rockford; Bruce Clampitt, New Providence; Cecil Cook, New Providence; Maurice Cook, New Providence; Dale Copley, Grundy Center; Etta Dawson, Washta; Dorothy Dennis, Melbourne; Helen Early, Mason City; Edellyn Farms, Wilson, Illinois; Herbert Fricke, State Center; Irma Fricke, State Center; Josephine Garden, Wapello; Ralph Givan, Grant; Leland Halter, Melbourne; Harry Hansen, Thornton; Arthur Henderson, Paullina; Walter K. Henderson, Paullina; Ernest Hostetter, Grundy Center; Helen Hurlbut, Conrad; Griffith Johnson, Wilton Junction; Henry Johnston, Wilton Junction; Merle Jones, North English; Russell Kernen, Nodaway; Velma Lanning, Rhodes; Lester Larson, Stanton; Paul Larson, Red Oak; Wayne Larson, Stanton; La Vernet Stock Farm, Jackson, Miss.; Chester Lunquist, Stanton; Marjorie McAlpine, Villisca; Willis A. McAlpine, Villisca; Wendell Mann, Malcom; Florence Martin, Monroe; Windsor Moore, Mt. Pleasant; Lee Norton, Wilton Junction; Carl Olander, Stanton; Edward Ossian, Stanton; Simon Ossian, Stanton; Harold Place, Muscatine; Clifford C. Palmquist, Stanton; Velma Parker, Clemons; W. W. Parkhill, Sigourney; Carroll Plager, Grundy Center; Florence Posten, Villisca; Wayne Probst, West Liberty; Delbert Royl, Grinnell; Virgil Sherwood, Hartwick; George W. Smith, Dunlap; Archibald Stinson, Villisca; Paul Stinson, Villisca; Elmer Sweet, Storm Lake; Clifford Tague, Kirkman; E. M. Thomas, Audubon; Buster Victor, Villisca; Etta Victor, Villisca; Keith Warne, Villisca; Charlotte Westrope, Harlan; Amy White, Rhodes; Cecil Wilkinson, Cummings; Glen Windom, Nodaway; Fred W. Wubbens, Wellsburg.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Steer, Spayed or Martin Heifer, Senior Yearling ($20, $15)—First, Josepine Garden on Prince; second, Hollandale Farm on Waterloo Prince.

Steer, Spayed or Martin Heifer, Junior Yearling ($20, $15, $10)—First, Lee Norton on Villagers Lad; second, Leland Halter on Roan Dale; third, Dorothy Dennis on Brookside Charmer.

Steer, Spayed or Martin Heifer, Under One Year ($20, $15, $10)—First. J. S. Naylor on Landcaster Type; second, Josephine Garden on Commodore; third, Edellyn Farms on Carolines King 1085321.

Champion Steer, Spayed or Martin Heifer ($20)—Lee Norton on Villager Lad.

Group of Three Head Owned by Exhibitor ($25)—First, Josephine Garden.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Junior Yearling ($20, $15, $10)—First, Velma Parker on Clara's Charmer; second, Willis A. McAlpin on Roan Diamond; third, Velma Lanning on Smooth Lad.

Champion Steer, Spayed or Martin Heifer ($20)—Velma Parker on Clara's Charmer.

FAT HEREFORD.

EXHIBITORS—Hans Anderson, Dike; Earl Bennett, Letts; Clifford Benson, La Moille; Rue Biterman, Nora Springs; W. N. W. Blayney, Denver, Colo.; Archie Braun, Nichols; Dale Clark, Hamlin; Cecil Cook, New Providence; Maurice Cook, New Providence; Blanche Curran, Mason City; Dorothy Dennis, Melbourne; Lavon Dennis, North English; Ruth Diller, Letts; Dean Dodder, Letts; Leah Earley, Mason City; Richard Early, Mason City; Lyle Ellis, Elliott; Paul Gildner, Rock Falls; Emmette Goecke, Marshalltown; Eldon Gohner, Grundy Center; Harry Gohner, Grundy Center; Ralph Hallquist, Red Oak; Adolph Hohn, Red Oak; Earnest Hostetter, Grundy

Center; Harry Johnson, Red Oak; Merle Jones, North English; Ivan Jones, Red Oak; Jessie Krause, Nora Springs; Raymond Lynn, Grundy Center; Phillip McLean, Marshalltown; Alvin Matzen, Mason City; Edwin K. Matzen, Mason City; Thad. E. Mendenhall, Fairbury, Neb.; Lee C. Mills, Audubon; Lee Norton, Wilton Junction; Donald Ritchie, Marathon; Wendell Ritchie, Marathon; Delbert Royl, Grinnell; Gerold Sherwood, Hartwick; Ivan Swanson, Stanton; Clarence Taggart, Audubon; John Tucker, West Branch; Burdette Van Note, Mason City; Lyle Van Note, Mason City; Lyle Wise, Decatur; Dale Wick, Mt. Pleasant.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Steer, Spayed or Martin Heifer, Senior Yearling ($25, $20)—First, E. M. Cassady & Son on Good Enough 417; second, Heath & Pearson on Dandy Brae 22nd 984906.

Steer, Spayed or Martin Heifer, Junior Yearling ($25, $20, $10, $5)—First, Clifford Benson on Beau Repeater; second, Earl Bennett on Sunbeam Dare 1010353; third, Dean Dodder on Lon; fourth, Heath & Pearson on Maples Dixie 659.

Steer, Spayed or Martin Heifer, Under One Year ($25, $20, $10, $5)—First, Thad E. Mendenhall on My Mischief 1121568; second, C. M. Largent & Sons on Kleberg Lad 4th 114859; third, Heath & Pearson on Vilisca Lad 658; fourth, Thad E. Mendenhall on Empress 6th.

Champion Steer, Spayed or Martin Heifer ($15)—Cassady & Son on Good Enough 417.

Group of Three Head, Owned by Exhibitor ($25)—Heath & Pearson.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Junior Yearling ($25, $20, $10, $5)—First, Alvin C. Matzen on Pat; second, Archie Braun on Adams; third, Archie Braun on Royal Ace; fourth, John Tucker on Ben Hur.

Steer, Spayed or Martin Heifer, Under One Year ($25)—First, Roy Van Winkle on White Face.

Champion Steer, Spayed or Martin Heifer ($15)—Alvin C. Matzen on Pat.

FAT ABERDEEN ANGUS.

EXHIBITORS—Harvey Andrews, Audubon; Carl Bower, South English; Leland Bower, South English; Levi Bower, South English; Garret I. Bremer, North English; Joseph Caputo, Marshalltown; Joe Coffman, North English; Robert Collins, Liscomb; Laura Dawson, Washta; John Dawson, Washta; Wendell Edson, Storm Lake; Lyle Ellis, Elliott; Clarence Egan, Dow City; John H. Fitch, Lake City; Gerald Francis, Storm Lake; Leland Geiger, North English; Fred W. Gilmore, North English; W. N. Harvey & Son, Knoxville; Marion Hendrickson, Nodaway; Ben J. Hensley, Exira; Hess & Brown, Waterloo; Henry Johnston, Wilton Junction; Merle Jones, North English; Leland Keen, Le Grand; Earl Korns, Hartwick; Nelson Korns, Hartwick; Mae McGuire, Storm Lake; Elizabeth Mandeville, Storm Lake; Marion Mandeville, Storm Lake; Ruth Manser, Storm Lake; Donald Meinhard, Storm Lake; Kenneth Messer, Grundy Center; Orville Neville, Malcom; Harold Pace, Muscatine; Thorwald Peterson, Storm Lake; Fay Perry, Gilman; Wayne Probst, West Liberty; Carl E. Rosenfeld, Kelley; James Shepard, Muscatine; Vernon Shepard, Muscatine; Virgil Sherwood, Hartwick; Sammy Slate, South English; William & Herman Stock, Baxter; Clarence M. Stoner, South English; George Stoner, South English; Horace Stoner, South English; Earl Stratton, Collins; Thomas Stratton, Collins; Irvin Swanson, Stanton; George Swihart, Baxter; J. Garrett Tolan, Farmingdale, Ill.; Albert Wagner, North English; Howard Wagner, North English; Donald Wensel, Melbourne; Clare Wiley, Indianola; Pearl Wiley, Indianola; Raymond Wiley, Indianola; Clarence Wilson, Storm Lake; Herbert Wilson, Storm Lake; Edward Zeman, Chelsea.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Pure Bred Steer, Spayed or Martin Heifer, Senior Yearling ($20, $15, $10)—First, Robert Collins on Black Laddie; second, John H. Fitch on Quinko 329747; third, R. W. Frank on Prince Perfection.

Pure Bred Steer, Spayed or Martin Heifer, Junior Yearling ($20, $15, $10)—First, Carl E. Rosenfeld on Keeper 3rd 333424; second, Earl Stratton on Mingo Lad; third, R. W. Frank on Prince Mac 2202.

Pure Bred Steer, Spayed or Martin Heifer, Under One Year ($20, $15, $10)—First, John H. Fitch on Kento 2215; second, Hess & Brown on Prince of Quietdale; third, R. W. Frank on Kay 2229.

Champion Pure Bred Steer, Spayed or Martin Heifer ($15)—Robert Collins on Black Laddie.

Pure Breds, Group of Three Head, Owned by Exhibitor ($25, $15)—First, Robert Collins; second, R. W. Frank.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Senior Yearling ($20, $15)—First, Carl E. Rosenfeld on Atta Boy; second, Robert Collins on Ray.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Junior Yearling ($20, $15, $10)—First, Dean Dodder on Bob; second, Carl E. Rosenfeld on Entertainer; third, Harold Pace on Quiet Lad.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Under One Year ($20, $15, $10)—First, Carl E. Rosenfeld on Rosengift Bobbie; second, J. Garrett Tolan on Eileenmere Boy; third, Robert Collins on Don.

Champion Steer, Spayed or Martin Heifer ($15)—Dean Dodder on Bob.

Group of Three Head, Owned by Exhibitor ($25, $15)—First, Carl E. Rosenfeld; second, Robert Collins.

PURE BRED GRADES AND CROSS BREDS.

EXHIBITORS—Lillian Early, Mason City; J. F. Gilbert, Earlham; Freeman B. Wood, Eldora.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Steer, Spayed or Martin Heifer, Senior Yearling ($15)—First, L. J. Palas on S. W. Robin 43950.

Steer, Spayed or Martin Heifer, Junior Yearling ($15, $10, $5)—First, Lillian Early on Snip; second, Freeman B. Wood on Woodrow; third, J. F. Gilbert on Prue 60958.

Champion Steer, Spayed or Martin Heifer ($10)—L. J. Palas on S. W. Robin 43950.

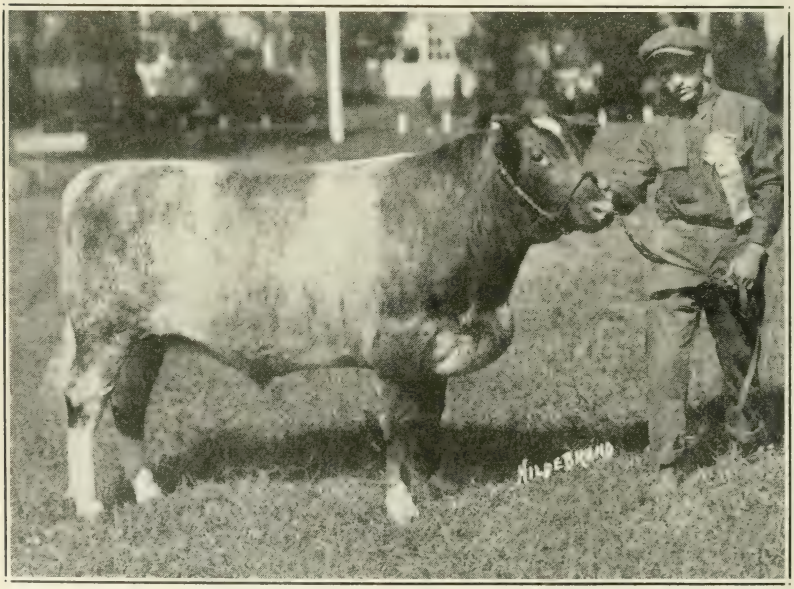
IOWA BOYS' AND GIRLS' MARKET CALF FEEDING CONTEST.
SHORTHORNS.

JUDGE..................................H. W. VAUGHN, St. Paul, Minn.

EXHIBITORS—Ernest Abbe, Toledo; Frank Abbe, Toledo; Leonard Abbe, Toledo; Howard Adix, Ogden; Fern Aikman, Gray; Glen Aikman, Gray; Eugene Alexander, Indianola; Floyd Ameberry, Knoxville; Glen Anderson, Stanton; Hans Anderson, Dike; Harvey Andrews, Audubon; Lawrence Avers, Melbourne; Clarence Aupperle, Adair; Edward Aupperle, Adair; Darrel Bacon, Toledo; Ivan Beck, Corning; Lawrence Beck, Corning; Orville W. Bergren, Stanton; Edward Barrogy, Rockwell; Earl Bennett, Letts; Carl Benson, La Moille; Clifford Benson, La Moille; Frank Berry, Prole; Fred Bitterman, Nora Springs; Lora Bitterman, Nora Springs; Rue Bitterman, Nora Springs; Everett Black, Audubon; Elmer Blood, Runnells; Frank Bottger, Ollie; Morgan Bonzer, Marshalltown; Carl Bower, South English; Leland Bower, South English; Levi Bower, South English; Archie Braun, Nichols; Harry Braun, Nichols; Garret I. Bremer, North English; Harry Brown, Adel; John Bronn, Stuart; Richard Bronn; Stuart; Clarence Burkhardt, Guthrie Center; Harold Burkhardt, Guthrie Center; Kenneth Burkhardt, Guthrie Center; Edwin Byams, Dysart; Marion Cahill, Rockford;

J. H. Calif, North English; Joseph Caputo, Marshalltown; Elmer Carpenter, Runnells; Eldon Cartwright, Boone; Bruce Clampitt, New Providence; Dale Clark, Hamlin; Herbert Cline, Knoxville; Joe Coffman, North English; Cecil Collins, Marshalltown; Robert Collins, Liscomb; Cecil Cook, New Providence; Maurice Cook, New Providence; Lenard Costello, North English; Verne Cooper, Corning; Dale Copley, Grundy Center; Hugh Colyle, Rockford; Everett Cree, Madrid; Raymond L. Cummings, Knoxville; Blanche Curran, Mason City; Lester Curran, Mason City; Worth Darnell, Knoxville; James D. Davie, Council Bluffs; Etta Dawson, Washta; John Dawson, Washta; Dorothy Dennis, Melbourne; Lavon Dennis, North English; Ronald Diggins, State Center; Ruth Diller, Letts; Thomas Donahue, North English; Dean Dodder, Letts; Loren Donelson, Ogden; Mervin Donelson, Odgen; Donald Dunham, Dunlap; Helen Early, Mason City; Leah Early, Mason City; Lillian Early, Mason City; Richard Early, Mason City; Leora Eddington, Sutherland; Wendell Edson, Storm Lake; Albert Egan, Dow City; Clarence Egan, Dow City; Lyle Ellis, Elliott; Leonard O. Erickson, Ogden; Frank Fleming, Runnells; Russell Fleming, Runnells; Leonard Formanek, Chelsea; Harold Forseman, Guthrie Center; Oscar Forseman, Guthrie Center; Gerald Francis, Storm Lake; Ralph Freel, Runnells; Herbert Fricke, State Center; Irma Fricke, State Center; Paul Gallagher, Williamsburg; Josephine Garden, Wapello; Leland Geiger, North English; Paul Gildner, Rock Falls; Fred W. Gilmore, North English; Ralph Givan, Grant; Emmette Goecke, Marshalltown; Earl Goetzman, Boone; Eldon Gohner, Grundy Center; Harry Gohner, Grundy Center; Virgil Goodrich, Malcom; Lewis Griffith, Audubon; Myron Griffith, Audubon; Ralph Hallquist, Red Oak; Leland Halter, Melbourne; Lucian Hammon, Woodward; Leopold Hanke, Knoxville; Harry Hansen, Thornton; Ben Hansley, Exira; Hattie Harvey, Knoxville; Lena Harvey, Knoxville; Russell Hayward, Dysart; Arthur Healy, North English; Arthur Henderson, Paullina; Donald Henderson, Central City; Walter L. Henderson, Paullina; Marion Hendrickson, Nodaway; Howard Hill, Earlham; Ernest Hitzhutzen, Cartersville; Leon Hitzhutzen, Cartersville; John Holmquist, Marshalltown; Albert Hogan, Corning; Aloysious Hogan, Corning; Adolph Holm, Red Oak; Ernest Hostetter, Grundy Center; Maxwell Hough, Weston; Carl Houston, Tama; Earl Houston, Tama; Helen Hurlburt, Conrad; Lloyd Jesse, Wilton Junction; Griffith Johnson, Wilton Junction; Harry Johnson, Red Oak; Henry Johnston, Wilton Junction; Charlotte Jones, North English; Ivan Jones, Red Oak; Merle Jones, North English; Lee Julander, Boxholm; Joseph Kadolph, Eldora; Joseph A. Kelley, Daugherty; Leland Keen, Le Grand; Russell Kernen, Nodaway; Weston C. Kimm, Guthrie Center; Glenn L. Klatt, Rockford; Earl Korns, Hartwick; Nelson Korns, Hartwick; Bernice Krause, Nora Springs; Bernice and Jessie Krause, Nora Springs; Jessie Krause, Nora Springs; Vema Lanning, Rhodes; Lester Larson, Stanton; Paul Larson, Red Oak; Wayne Larson, Stanton; Albert Lengeman, Coon Rapids; Elmer Lengeman, Coon Rapids; Delbert Lewis, Runnells; Harlie Lewis, Bayard; Chester Lundquist, Stanton; Raymond Lynn, Grundy Center; Marjorie McAlpine, Villisca; Willis A. McAlpine, Villisca; Elizabeth McElroy, Nodaway; Mae McGuire, Storm Lake; Charlie McIntire, Stuart; Ralph McIntire, Stuart; Phillip McLean, Marshalltown; Elizabeth Mandeville, Storm Lake; Marion Mandeville, Storm Lake; Windell Mann, Malcom; Ruth Manser, Storm Lake; Florence Martin, Monroe; Nellie Massee, Rockford; Alvin Matzen, Mason City; Edwin H. Matzen, Mason City; Ella Matzen, Mason City; Lawrence Matzen, Mason City; Donald Meinhard, Storm Lake; Kenneth Messer, Grundy Center; Charley Miller, Runnells; Grace Miller, Collins; Hurbert H. Miller, Runnells; Perry Miller, Brooklyn; Lee A. Miller, Audubon; Winsor Moore, Mt. Pleasant; Gifford Nelson, Dunlap; Orville Neville, Malcom; Raymond Nicholl, Gilman; Vera Nicholl, Gilman; Lee Norton, Wilton Junction; Frank O'Brien, North English; Lynn H. O'Brien, North English; Carl Olander, Stanton; Edward Ossian, Stanton; Simon Ossian, Stanton; Harold Pace, Muscatine; Clifford C. Palmquist, Stanton; Velma Parker, Clemons; Fay Perry, Gilman; Earl Peterson, Dayton; Thowald Peterson, Storm Lake; Carrol Plager, Grundy Center; Dale

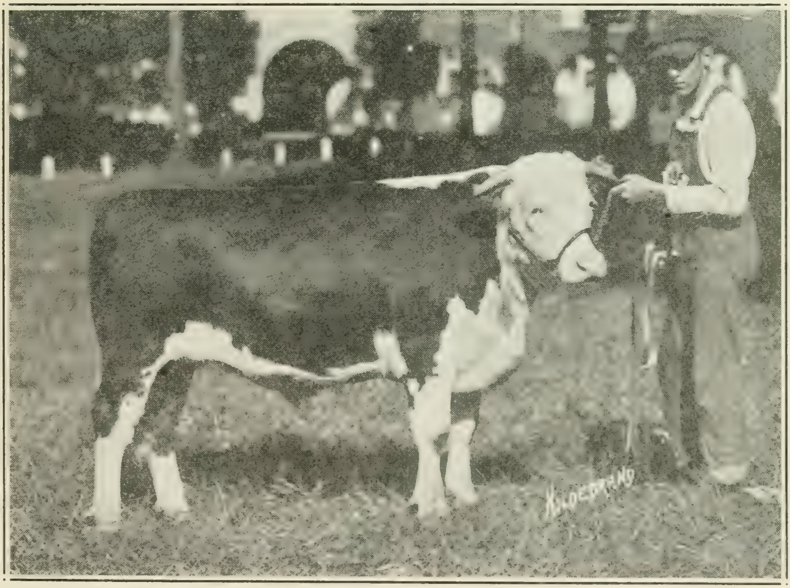
Porter, Neola; Glenn Porter, Neola; Florence Posten, Villisca; Merle Preston; Melbourne; Wayne Probst, West Liberty; Paul Purviance, Minburn; Donald Rees, Pleasantville; Ira Rees, Dunlap; Elliott Reutter, Ogden; Donald Ritchie, Marathon; Wendell Ritchie, Marathon; Willis Roberts, Deep River; Robert Rogers, Union; Delbert Royl, Grinnell; Earnest Schalow, Adair; Le Roy Scott, Marion; James Shepard, Muscatine; Vernon Shepard, Muscatine; Gerold Sherwood, Hartwick; J. Wesley Sherwood, Knoxville; Kermit Sherwood, Knoxville; Virgil Sherwood, Hartwick; Sammy Slate, South English; George W. Smith, Dunlap; Iman Snyder, Boone; Herman Spencer, Runnells; Ray Spencer, Runnells; Beryle Spongler, Adair; Frank Spongler, Adair; Lennie Stark, Boxholm; Ralph Stark, Boxholm; Archibald Stinson, Villisca; Paul Stinson, Villisca; William and Herman Stock, Baxter; Clarence M. Stoner, South English; Geo. Stoner, South English; Horace Stoner, South English; Quentin Stowe, Ackley; Earl Stratton, Collins; Thomas Stratton, Collins; Ralph Stringham, Dexter; Stuart Stringham, Dexter; Irwin Swanson, Stanton; Ivan Swanson, Stanton; Ivar Swanson, Boxholm; Elmer Sweet, Storm Lake; Luvern Swigert, Boxholm; Theron Swigert, Boxholm; Geo. Swihart, Baxter; Clarence Taggart, Audubon; Clifford Tague, Kirkman; Clifton Teter, Stuart; Grace Teter, Knoxville; Henry Teter, Stuart; E. M. Thomas, Audubon; Loran Thorngren, Boxholm; Iver Thorsheim, Radcliffe; John Tucker, West Branch; Carroll Turner, Anita; Eric Turner, Anita; Herbert Turner, Anita; Max Turner, Anita; Robt. Van Maren, Runnells; Walter Van Maren, Runnells; Burdette Van Note, Mason City; Lyle Van Note, Mason City; Buster Victor, Villisca; Etta Victor, Villisca; James M. Vreizelaar, Otley; Richard Vriezelaar, Otley; Albert Wagner, North English; Howard Wagner, North English; Donald Wallace, Marion; Keith Warne, Villisca; Donald Wense, Melbourne; Charlotte Westrope, Harlan; Amy White, Rhodes; Dale Wick, Mt. Pleasant; Clare Wiley, Indianola; Pearl Wiley, Indianola; Raymond Wiley, Indianola; Cecil Wilkinson, Cummings; Clarence Wilson, Storm Lake; Herbert Wilson, Storm Lake; Glen Windom, Nodaway; Lyle Wise, Decatur; Freman B. Wood, Eldora; Fred W. Wubbens, Wellsburg; Edward Zeman, Chelsea.



MAINLICK
First Shorthorn Baby Beef Steer. Glen Windom, Nodaway, Iowa.

Shorthorn Market Calf ($25, $22, $20, $18, $16, $14, $14, $14, $14, $14, $12, $12, $12, $12, $10, $10, $10, $10, $10, $9, $9, $9, $9, $9, $9, $8, $8, $8, $8, $8, $7, $7, $7, $7, $7, $7)—First, Glen Windom on Mainlick; second, Leland Halter on Dale's Mate; third, Dorothy Dennis on Brookside Model; fourth, Nellie A. McAlpin on Roan Diamond; fifth, Henry Johnston on Snow Ball; sixth, Velma Parker on Clara's Charmer; seventh, Lee Norton on Villagers Lad; eighth, Maurice Cook on Roan Lad 2d; ninth, Joseph Caputo on Knight of Brookside; tenth, Vera Nicholl on Red Count; eleventh, Harry Hansen on Gainford Type 1093990; twelfth, Virgil Sherwood on Nellie; thirteenth, Virgil Sherwood on Elden; fourteenth, Charlotte Westrope on Villager's Dorothy; fifteenth, Albert Egan on Roan Count; sixteenth, Clifford Tague on Buddy; seventeenth, Elmer Carpenter on Billey Buster; eighteenth, Carl Olander on Diamond Flash; nineteenth, Herbert Fricke on Callissie's Type; twentieth, Leland Halter on Roan Dale; twenty-first, Clifford C. Palmquist on Diamond; twenty-second, Kenneth Burkhart on Silver King; twenty-third, Charley Miller; twenty-fourth, Cecil Cook on Babe Ruth; twenty-fifth, Velma Parker on Roan Coronet; twenty-sixth, Velma Lanning on Smooth Lad; twenty-seventh, Ralph Givan; twenty-eighth, Bruce Clampitt; twenty-ninth, Etta Victor on Diamond Villager; thirtieth, E. M. Thomas on Gainford Gloster; thirty-first, Fred W. Wubbens; thirty-second, Donald Dunham on Orphan Boy; thirty-third, Ronald Diggins on Sultans Champion; thirty-fourth, Earnest Hostetter on Redskin; thirty-fifth, Donald Rees on Annie; thirty-sixth, Elmer Lengerman.

Hereford Market Calf ($25, $22, $20, $18, $16, $14, $14, $14, $14, $14, $12, $12, $12, $12, $10, $10, $10, $10, $9, $9, $9, $9, $9, $9, $8, $8, $8, $8, $8, $7, $7, $7, $7, $7, $7)—First, Clifford Benson on Beau Repeater; second, Alvin C. Matzen on Pat; third, Ruth Diller on Sunbeam Dare 1010353; fourth, Cecil Collins on White Face; fifth, Harry Goliner on Tom; sixth, Archie Braun on Adams; seventh, Phillip McLean on Beau Daisy; eighth, Emmett Goecke on Beauman; ninth, Earl Bennett on Generous Dare 1038960; tenth, Alvin C. Matzen on Prince Lad 27th 1000655; eleventh, Hans Anderson on

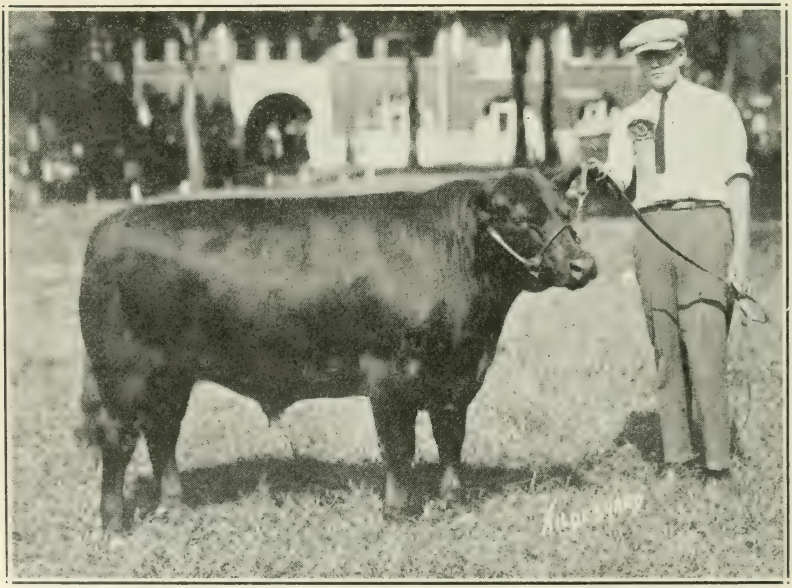


BEAU REPEATER

First Hereford Baby Beef Steer. Clifford Benson, La Moille, Iowa.

Dick; twelfth, Richard Early on Bing; thirteenth, J. Wesley Sherwood; fourteenth, Leonard Formanek on Pilot; fifteenth, Dean Dodder on Laddie Dare; sixteenth, Paul Gallagher; seventeenth, Iver Thorsheim on Oliver Dale; eighteenth, Charlie McIntire; ninteenth, Carl Benson on All Style; twentieth, Merle Jones; twenty-first, Harlie Lewis; twenty-second, Dale Wick on Farm Fairfax-Dale Wick; twenty-third, Loran Thorngren; twenty-fourth, John Tucker on Bobbie; twenty-fifth, John Tucker on Ben Hurr; twenty-sixth, Archie Braun on Royal Ace; twenty-seventh, Robert Rogers on Beau Moukton 10th; twenty-eighth, Lyle Wise on Grundy Lad 1008079; twenty-ninth, Archie Braun on Laddie; thirtieth, Weston C. Kimm; thirty-first, Lyle Van Note on Expect 2d; thirty-second, Jessie Krause on Jiggs; thirty-third, Blanche Curran on Buddie; thirty-fourth, Maurice Cook on Clearview Lad; thirty-fifth, Richard Brown; thirty-sixth, Dorothy Dennis on Standard Lad.

Aberdeen Angus ($25, $22, $20, $18, $16, $14, $14, $14, $14, $14, $12, $12, $12, $12, $10, $10, $10, $10, $10, $9, $9, $9, $9, $9, $9, $8, $8, $8, $8, $8, $7, $7, $7, $7, $7, $7)—First, Dean Dodder on Bob; second, Edward Zeman on Johnnie; third, Robert Collins on Max; fourth, John Holmquist on Black Glenmore; fifth, Harold Pace on Quiet Lad; sixth, Fay Perry on Justo Blackbird; seventh, John Holmquist on Justo Max; eighth, Earl Stratton on Mingo Lad; ninth, Thomas Stratton on Baxter Baby; tenth, Horace Stoner on Laddie; eleventh, Orville Neville on Spot; twelfth, Lawrence Aves on "Smokes" Blackcap; thirteenth, Le Roy Scott; fourteenth, Joseph Caputo on Black Lad; fifteenth, Dean Dodder on George; sixteenth, Raymond Nicholl on Blackie; seventeenth, Clarence Egan on Black Knight; eighteenth, Wayne Probst on Louie; nineteenth, Russell Hayward on Robinhood; twentieth, Floyd Amsberry; twenty-first, Delbert Royal on Blackbird; twenty-second, Nelson Korns on Black Joe 3d; twenty-third, Harland Briggs on Harlan; twenty-fourth, Vera Nicholl on Bob; twenty-fifth, Harry Braun on McAllister; twenty-sixth, Lawrence Aves on Buster; twenty-



"BOB"
First Angus Baby Beef Steer. Dean Dodder, Letts, Iowa.

seventh, Harry Braun on M. C. Halleck; twenty-eighth, Leonard Abbe; twenty-ninth, Garrett I. Bremer; thirtieth, Garrett I. Bremer; thirty-first, Leland Keen on Black Max; thirty-second, Horace Stoner on Dale III; thirty-third, Geo. Stoner on Wilbur; thirty-fourth, Elizabeth Mandeville on Lad; thirty-fifth, Harold Scott, Marion, Iowa, on Scott; thirty-sixth, Kenneth Messer on Prince Blue Blood.

First Prize Calf (Gold Watch)—Dean Dodder on Bob.

Champion (Silver Loving Cup)—Clifford Benson on Beau Repeater.

COUNTY CALF CLUB EXHIBIT

County Market Calf Club Exhibit of Ten Calves from Same County ($35, $25, $20, $20, $15, $15, $15, $10, $10, $9, $9, $9, $9, $9)—First, Marshall County Baby Beef Club; second, Cerro Gordo County Calf Club; third, Muscatine County Calf Club; fourth, Marshall County Calf Club; fifth, Tama County Calf Club; sixth, Keokuk County Calf Club; seventh, Iowa County Calf Club; eighth, Guthrie County Calf Club; ninth, Hardin County Calf Club; tenth, Henry County Calf Club; eleventh, Marshall County Calf Club; twelfth, Boone County Calf Club; thirteenth, Cerro Gordo County Calf Club; fourteenth, Marion County Calf Club.

PURE BRED HEIFER CLUB

EXHIBITORS—John Blake, Waukee; Lloyd E. Burns, Orient; Robert E. Burns, Orient; Joseph Caputo, Marshalltown; Eldon Cartwright, Boone; Robert Collins, Liscomb; Bertha Dannen, Melbourne; Mary Dannen, Melbourne; Laura Dawson, Washta; James Duff, Orient; Leland Duff, Orient; Leslie Harden, Corning; Earl Korns, Hartwick; Nelson Korns, Hartwick; Orville Neville, Malcom; Clark Plummer, Marshalltown; Lester Plummer, Marshalltown; Virgil Sherwood, Hartwick.

JUDGE............................H. W. VAUGHAN, St. Paul, Minn.

SHORTHORN

Senior Heifer Calf ($15)—First, Paul Purviance on Revelanta Queen.

Junior Yearling Heifer ($15, $12, $10)—First, Eldon Cartwright on Snow Ball; second, Harry Brown on Royal May Flower III 1056568; third, Leslie Harden on Rosemary 6th 1078216.

Champion Heifer (Trophy Offered by the Iowa Homestead)—Eldon Cartwright on Snow Ball.

HEREFORDS

Junior Yearling Heifer ($15, $12, $10)—First, Verne Cooper on Dixie Bell 1033443; second, Leland Duff on Queen Blanchard 27th 1016717; third, James Duff on Queen Blanchard 28th 1016718.

Champion Heifer (Trophy, offered by Wallace's Farmer, Des Moines, Iowa)—Verne Cooper on Dixie Bell 1033443.

ABERDEEN ANGUS

Senior Heifer Calf ($15, $12, $10)—First, John Blake on Blackbird Jewell; second, Robert Collins on Shenandoah Lassie; third, John Blake on Blackbird Gem.

Senior Yearling Heifer ($15)—First, Joseph Caputo on Quaker Pearl.

Junior Yearling Heifer ($15, $12, $10, $8, $7, $5)—First, Virgil Sherwood on Buckeye Valley Maggie 4th 352395; second, Clark Plummer on Quaker Blackbird 2d 328642; third, Earl Korns on Walnut Dell Pride 11th 345717; fourth, Mary Donner on Darky Girl 8th; fifth, Lloyd E. Burns on Queen Etta B. 347820; sixth, John Blake on Blackcap Bella Donna 349439.

Champion Heifer ($25 Gold Watch, offered by the American Aberdeen Angus Breeders' Association)—Virgil Sherwood on Buckeye Valley Maggie 4th 352395.

Group, Consisting of Five Head, Shown by One Club ($30, $25)—First, Marshall County Baby Beef Club; second, Poweshiek County Baby Beef Club.

SWINE DEPARTMENT

SUPERINTENDENT......................CYRUS A. TOW, Norway, Iowa.

POLAND CHINA

EXHIBITORS—Anderson Bros., West Liberty; Dale Barker, Keosauqua; Bell Bros., Wood & Brown, Atlantic; Harry Benton, Mitchellville; John Blauer, Tingley; D. J. Burns, Stuart; Conrad & Dowling, Valley Junction; I. J. Conrad, Melbourne; Marion Conrad, Melbourne; Conrad & Son, Melbourne; W. C. Conrad, Melbourne; Wm. Cottrill, Des Moines, R. F. D. 6; G. C. Cox, Oskaloosa; C. W. Crees, Coon Rapids, Iowa, R. F. D. 4; J. R. Crozier, Knoxville; Howard Dann, Waukee; B. M. Davis & Sons, Beaver City, Neb.; M. A. Dowling, Valley Junction; H. B. Duncan, Bagley; Ed Dvorak, Wilber, Neb.; S. L. Farlow, Ankeny; H. Fesenmeyer & Son, Clarinda; Fesenmeyer & Rucker Bros., Clarinda; H. B. Floto, State Center; J. M. Ford, Milo; Dr. C. C. Franks, Grimes; C. D. Freel, Runnells; L. H. Glover, Grandview, Mo.; Glover & Watts, Green City, Mo.; Ed. A. Greiner, Colo; Hague & Girton, Fairfield; W. B. Halsted, Van Wert; O. J. Hess, Worthington; Earl Howard, Shenandoah; D. E. Hudson & Sons, Montezuma; Elmer James, Selma; J. C. Johnson, Lynnville; John Jeppson, Goldfield; Harold Jump, Waukee; Lenene Jump, Waukee; Kessler Bros., Solon; Edd Kessel, Solon; Kessler Bros. & Smykil, Solon; Garrett P. Klein, Altoona; James C. Lane, Greenfield; Morris Legler, Letts; Wm. Lentz, Ankeny; C. Ray Leonard, Corning; D. C. Lonergan & Son, Florence Station, Omaha, Neb.; Wilfred McClanahan, Bondurant, R. F. D. 2; Lawrence McGonish, West Liberty; Manchester Bros., Leon; Mandeville & Edson, Storm Lake; O. R. Mark, Adel; H. M. Menough, Grimes; P. M. Nichols, Iowa City; C. M. O'Neil, Colo; W. F. Otcheck & Son, Altoona; Isaac Overton, Knoxville; D. H. Paul, Haverhill; C. W. Phillips, New Sharon; Omer Payne, Linden; O. E. Perry, Gilman; John L. Peters, Bouton; Pleasant Hill Farm, Leshara, Neb.; Pray & Thomas, Allerton; L. B. Price, Renwick; I. M. Reed, Oskaloosa; Fred G. Reis, Indianola; Willard Robinson, State Center; Rucker Bros., Hepburn; Mark I. Shaw, Monroe; Fred Sievers, Audubon; Emil W. Smykil, Solon; Sophian Farms, Butler, Mo.; J. C. Spera & Son, Winterset; Wm. Timmerman, Manning; L. R. Van Nice, Russell; A. J. Way, New Sharon; Martin Wendres, West Liberty; Wengert Bros., State Center, R. F. D. 1; W. L. Wiley, Menlo; Alvin Windom & Son, Nodaway.

JUDGE..................................W. L. McNUTT, Ord, Neb.

Aged Boar ($15, $12, $8, $6, $4, $3, $2)—First, Conrad & Dowling on The Pathfinder 406701; second, Fred Sievers on Hawkeye King 407427; third, C. M. O'Neil on The Banker 421205; fourth, Garrett P. Klein on The Headlight 406699; fifth, Ed. A. Dvorak on Commander 2nd 430963; sixth, Pleasant Hill Farm on Western Honor 417615; seventh, Wm. Cottrill on The Iowan 407935.

Senior Yearling Boar ($15, $12, $8, $6, $4)—First, Kessler Bros. & Smykil on Prospect Giant; second, Fred Sievers on Giant King 461923; third, B. M. Davis & Sons on Black Raven 480227; fourth, C. W. Crees on Decide Again 121533; fifth, Lester R. Van Nice on The Harvester 129924.

Junior Yearling Boar ($15, $12, $8, $6, $4, $3, $2)—First, H. M. Meneough on The Great Mid-West 483623; second, Conrad & Dowling on The Armistice 459203; third, L. H. Glover on Columbias Pride 129229; fourth, C. W. Crees on Highland Ridge King 124806; fifth, J. C. Spera & Sons on Avalon 461011; sixth, I. M. Reed on Jack O. Hearts 484691; seventh, Pray & Thomas on Peter L. 472171.

Senior Boar Pig ($12, $10 ,$8, $6, $4, $3, $2)—First, Conrad & Dowling on Pathfinder Again 483057; second, L. H. Glover on Peter Grimm 129935; third, H. M. Meneough on The Shamrock 479653; fourth, Bell Bros., Wood & Brown on Radio 480631; fifth, C. Ray Leonard on Cashier 129396; sixth, Kessler Bros. & Smykil; seventh, Pleasant Hill Farm on Caruso.

Junior Boar Pig ($12, $10, $8, $6, $4, $3, $2)—First, I. J. Conrad on Buster Hawkeye 483044; second, M. A. Dowling on By Gosh 4811931; third, L. H. Glover on Animation 130006; fourth, I. J. Conrad on Baron Hadley 483045; fifth, M. A. Dowling on My Gosh 481935; sixth, Ed. A. Dvorak on Lil's Giant 1st 478731; seventh, Isaac Overton on Giant Boy 483555.

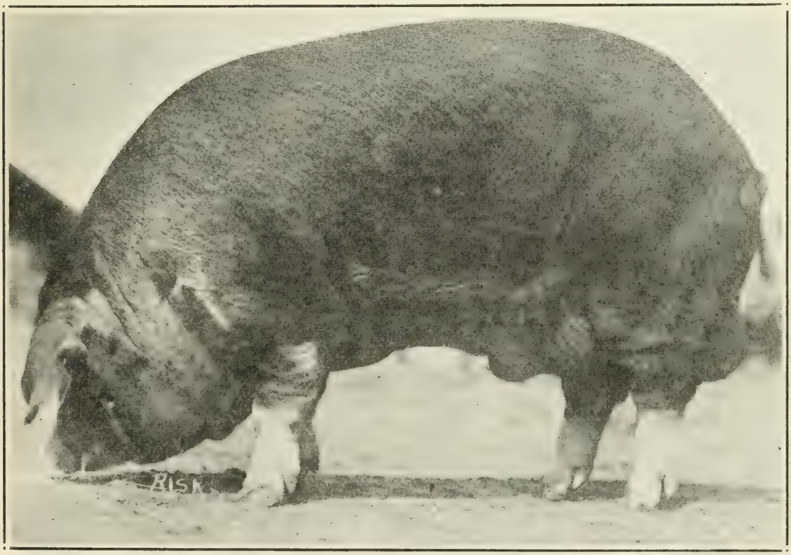
Aged Sow ($15, $12, $8, $6, $4, $3, $2)—First, L. H. Glover on Liberator's Best II 278680; second, D. C. Lonergan & Sons on Iowa Giantess 283092; third, A. J. Way on Bob's Beauty 1511620; fourth, D. E. Hudson & Sons on Fair Liberty 915424; fifth, Earl Howard on Long Lady Timm 269799; sixth, L. H. Glover on Miss Highland 297016; seventh, Bell Bros., Wood & Brown on Slim 1131610.

Senior Yearling Sow ($15, $12, $8, $6, $4, $3)—First, Conrad & Dowling on Hawkeye Miss 3d 1094954; second, Pleasant Hill Farm on Miss Victory 2d; third, L. H. Glover on Liberator's Pride 311486; fourth, Ed. A. Dvorak on Black Lil 3d 1072868; fifth, Wengert Bros. on Hawkeye Miss 2d 1094952; sixth, Kessler Bros. & Smykil.

Junior Yearling Sow ($15, $12, $8, $6, $4, $3, $2)—First, Conrad & Dowling on Latchnite Maid 2d 1093494; second, Conrad & Dowling on Latchnite Maid 1093492; third, H. M. Meneough on Rainbow Queen 1102094; fourth, L. H. Glover on Revelation's Lass 321083; fifth, Pleasant Hill Farm on Western Queen; sixth, L. H. Glover on Liberator's Model 305513; seventh, D. C. Lonergan & Sons on Designer Girl 297636.

Senior Sow Pig ($12, $10, $8, $6, $4, $3, $2)—First, Conrad & Dowling on Pathfinder Miss 2d 1186224; second, Conrad & Dowling on Rainbow Miss 1176632; third, L. H. Glover on Revelation Alice 321086; fourth, H. M. Meneough on The Blarney Queen 1176220; fifth, Pleasant Hill Farm on Victory Giantess 2d; sixth, H. M. Meneough on The Irish Rose 1176222; seventh, Kessler Bros. & Smykil on Big Emma.

Junior Sow Pig ($12, $10, $8, $6, $4, $3, $2)—First, M. A. Dowling on Armistice Miss 183030; second, L. H. Glover on Revelation Lillie II 321309; third, I. J. Conrad on Hawkeye Wonder 1186210; fourth, Ed. A. Dvorak on



THE PATHFINDER

Grand Champion Poland China Boar. Conrad & Dowling, Melbourne, Iowa.

Lil's Giantess 1st 1173512; fifth, Marvin Conrad; sixth, I. J. Conrad on Iowa Lass 1186212; seventh, A. J. Way on Bob's Beauty 1st 1186814.

Senior Champion Boar ($10)—Conrad & Dowling on The Pathfinder 406701.

Junior Champion Boar ($10)—I. J. Conrad on Buster Hawkeye 483044.

Grand Champion Boar, Any Age ($15)—Conrad & Dowling on The Pathfinder 406701.

Senior Champion Sow ($10)—L. H. Glover on Liberator's Best 2d 278680.

Junior Champion Sow ($10)—Conrad & Dowling on Pathfinder Miss 2d 1186224.

Grand Champion Sow, Any Age ($15)—L. H. Glover on Liberator's Best 2d 278680.

Aged Herd, Owned by Exhibitor ($15, $12, $8, $6, $4)—First, Conrad & Dowling; second, L. H. Glover; third, H. M. Meneough; fourth, Pleasant Hill Farm; fifth, Kessler Bros. & Smykil.

Aged Herd, Owned and Bred by Exhibitor ($15, $12)—First, P. M. Nickols; second, H. M. Meneough.

Young Herd, Owned by Exhibitor ($15, $12, $8, $6, $4, $3, $2)—First, Conrad & Dowling; second, M. A. Dowling; third, I. J. Conrad; fourth, L. H. Glover; fifth, H. M. Meneough; sixth, Pleasant Hill Farm; seventh, A. J. Way.

Young Herd, Owned and Bred by Exhibitor ($15, $12, $8, $6, $4, $3, $2)—First, M. A. Dowling; second, I. J. Conrad; third, L. H. Glover; fourth, H. M. Meneough; fifth, Pleasant Hill Farm; sixth, A. J. Way; seventh, C. Ray Leonard.

Get of Sire ($15, $12, $8, $6, $4, $3, $2)—First, I. J. Conrad; second, M. A. Dowling; third, M. A. Dowling; fourth, L. H. Glover; fifth, Pleasant Hill Farm; sixth, H. M. Meneough; seventh, A. J. Way.

Produce of Sow ($15, $12, $8, $6, $4, $3, $2)—First, Conrad & Dowling; second, M. A. Dowling; third, I. J. Conrad; fourth, L. H. Glover; fifth, H. M. Meneough; sixth, A. J. Way; seventh, C. Ray Leonard.

DUROC JERSEYS.

EXHIBITORS—A. E. Alaway, 30th and Granger, Des Moines; A. P. Alsin, Boone; C. E. Alsin, Boone; Ralph Allgood, Lacey; Clyde Barnett, Redfield; Chas. L. Berry, Route No. 1, Iowa City; Fred Bonnesen, Kimballton; J. M. Brockway & Co., Letts; A. V. Carey, Jewell; M. C. Cramer & Son, Monroe; Chas. S. Crawford, Indianola; J. C. Danner, Yale; Roy Demory, Indianola; J. J. Emmons, Saline, Mo.; Fernow & Enck, Marion; Lysle Fox, Dallas Center; Virgil Fox, Dallas Center; Worlie Frost, Waukee; L. W. Gibbons, Carlisle; Lucian S. Gibbs, Clearfield; W. H. Gibson & Sons, Marion; Howard B. Good, Plainfield; Hanks, Bishop & Droz, New London; Emmet C. Hanshaw, Douds; W. H. Helmke, Renwick; Bert Holmes, Muscatine; Paul Hoag, Muscatine; Lloyd Harvenagle, Atalissa; Frank Hawker, West Liberty; W. J. Hanson, Holbrook; Jas. L. Harper & Son, Ames; Ernest J Hawker, West Liberty; J. E. Hester, Earlham; Fred Hawker, West Liberty; F. E. Humphrey, North English; D. E. Huston, Iowa Falls; Iltis & Olsen, Route No. 1, Des Moines; Jones & Lengeman, Coon Rapids; Fred Knop, Charter Oak; Leonard Lister, Marshalltown; W. W. Lockrodge, North English; C. W. McDuff, Monroe; R. G. McDuff, Monroe; Aloysius McKee, Creston; McKee Bros., Creston; J. W. McGee, Melrose; A. E. Mallory, Hampton; Mallory & Lindeman, Hampton; Mallory & Skillen, Hampton; Mallory & Trotter, Hampton; Mallory & Wilp, Hampton; Francis Mapes, Earlham; Middleswart & Hall, Carlisle; Miner Bros., Clear Lake; Paul Neuroth, Haverhill; Roy Neuroth, Haverhill; Roy Nichol, Clemmons; Stacy Nicholl, Jr., Clemons; Owen & Son, Guthrie Center; E. L. Perry, St. Anthony; Lee A. Perry, Indianola; Ben H. Person, Adelphi; Adam Pfeiffer, Baxter; Ray Roush, Douds; Lennie Royer, Adel; Walter Sargent, Mitchellville; John Schoborg, Haverhill; I. W. Shannon, Ackworth; W. B. Shaw, Monroe; Jake Siebrands, Allison; M. Spencer, Audubon; Ben G. Studer, Wesley; Harold Swallow, Valley Junction; Howard Swallow, Valley Junction; Thompson & Zellmer, Atlantic; Mike Trier, Keota; United States Indian School, Genoa, Neb.; Roy Vaughn, Selma; Vipond & Son, Algona; C. F. Waldo, DeWitt, Neb.; J. D. Waltemeyer & Son, Melbourne; Lloyd Wellendorf, Algona; Donald Wensel, Melbourne; Grant White, Afton; R. W. Wiles, Goddell; Wilson & Gurgery, Harlan; Harold Zellmar, Atlantic; Oscar Zellmar, Atlantic.

JUDGE.............................CHAS. A. MARKER, Auburn, Ill.

Aged Boar ($15, $12, $8, $6, $4, $3, $2)—First, J. A. Vipond & Sons on Sensation King 359231; second, Howard B. Good on King of Pathmasters 409199; third, Jones & Lengeman on Iowa Sensation 369277; fourth, J. D. Waltemeyer & Son on Sky Pilot 362835; fifth, Thompson & Zellmer on Emancipator 417201; sixth, W. H. Helmke on Reformer's Giant 436177; seventh, Selbrand and Mallory on Path's Sensation 344163.

Senior Yearling Boar ($15, $12, $8, $6, $4, $3, $2)—First, Hanks, Bishop & Droz on Jr. Col. Pathfinder 412369; second, Hanks, Bishop & Droz on Unique Colonel 410389; third, McKee Bros. on The Rival 406033; fourth, Mallory & Trotter on Giant Wonder I am Jr. 424435; fifth, Fred Knop on Ideal Orion Sensation 446165; sixth, J. E. Hester on Bandmaster 405037; seventh, Ralph Allgood on Pathfinder Orion 443987.

Junior Yearling Boar ($15, $12, $8, $6, $4, $3, $2)—First, J. D. Waltemeyer & Son on J. D.'s Sensation 426751; second, Fred B. Owens & Sons on High Colonel 408435; third, M. Spencer on Good Enough Sen. 409283; fourth, Ben H. Person on Uneeda Sensation King B. 405479; fifth, Iltis and Olson on Pathfinders Last 412599; sixth, Bert Holmes on Pathfinder Bill 457091; seventh, Vanmeter & Son's on Imperial Revelation 407437.

Senior Boar Pig ($12, $8, $6, $4, $3, $2)—First, Bert Holmes on Sensation Jack 455099; second, Hanks, Bishop & Droz on Unique Pathmaker 456097; third, Thompson & Zellmer on Gigantic Sensation 456327; fourth, J. D. Waltemeyer & Son on Pilot Orion 1st 454739; fifth, J. D. Waltemeyer & Son on Pilot Orion 454737; sixth, Jones & Lengeman on Some Sensation; seventh, W. J. Hanson on Young Raven 457017.

Junior Sow Pig ($12, $10, $8, $6, $4, $3, $2)—First, Aloysius McKee on Rival's Leader; second, J. D. Waltemeyer & Son on J. D. Sensation 2d 454733; third, J. D. Waltemeyer & Son on Sky Pilot Jr. 454715; fourth, Bert Holmes on Pathfinder Bill 2d 457093; fifth, Aloysius McKee on Rivals Masterpiece; sixth, W. W. Lockridge on Laddie 455197; seventh, W. W. Lockridge on Exampler 455195.

Aged Sow ($15, $12, $8, $6, $4, $3, $2)—First, E. L. Perry on Miss Wonder Giant 1st 939314; second, Hanks, Bishop & Droz; third, J. M. Brockway on Della Pathfinder Sensation 1st; fourth, J. M. Brockway on Queen of Sensation 944516; fifth, J. D. Waltemeyer & Son on Wonder Maid 8th 938354; sixth, McKee Bros. on Pathfinder Queen 1085528; seventh, McKee Bros. on M. B.'s Giant Lady 1085338.

Senior Yearling Sow ($15, $12, $8, $6, $4, $3, $2)—First, J. D. Waltemeyer & Son on Belle Wonder 3d 1094304; second, J. D. Waltemeyer & Son on Belle Wonder 1094298; third, Mike Trier on Pathmaster Maid 1190338; fourth, Fred Bonnesen on Star Lady 1074330; fifth, U. S. Indian School on Utmost Lady 1071538; sixth, Jones & Lengeman on Eveland's Sensation Col 1028200; seventh, Fred Bonnesen on Star Lady 2d 1074332.

Junior Yearling Sow ($15, $12, $8, $6, $4, $3, $2)—First, McKee Bros. on M. B.'s Giantess; second, J. D. Waltemeyer & Son on Wonder Belle 1186438; third, Hanks, Bishop & Droz on Miss Royal Wonder 2d 1180216; fourth, Hanks, Bishop & Droz on Miss Royal 3d 1180218; fifth, McKee Bros. on Rival's Lady 1072454; sixth, A. E. Mallory on Trailfinder's Mae 3d 1223336; seventh, U. S. Indian School on Miss Critic Prince 3d 1071534.

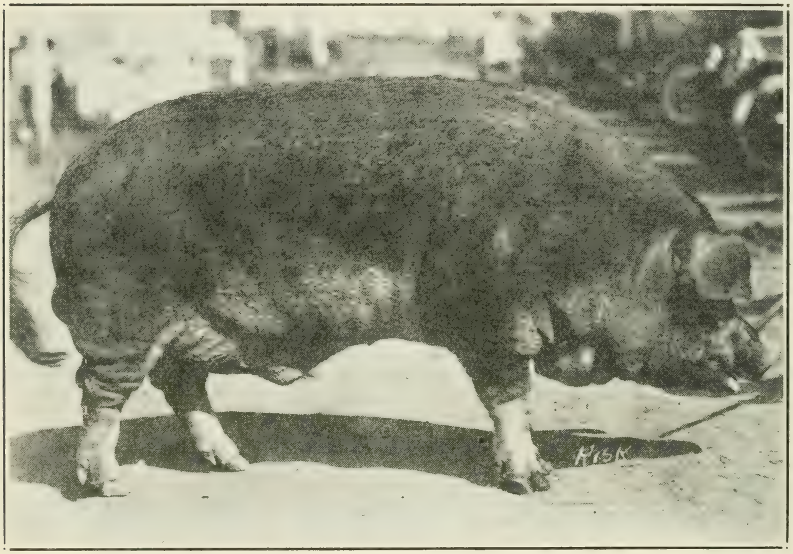
Senior Sow Pig ($12, $10, $8, $6, $4, $3, $2)—First, J. D. Waltemeyer & Son on Miss Sky Pilot 1st 1221960; second, Hanks, Bishop & Droz on Rosa Pathmarker 1225072; third, Hanks, Bishop & Droz on Rosa Pathmarker

2d 1225066; fourth, Jones & Lengeman on Iowa's Pride II; fifth, J. D. Waltemeyer & Son on Miss Pilot 1221958; sixth, W. J. Hanson on Raven Lady 1227426; seventh, U. S. Indian School on Wonder Princess 1219438.

Junior Sow Pig ($12, $10, $8, $6, $4, $3, $2)—First, W. W. Lockridge on Lady 1223042; second, W. W. Lockridge on Lassie 1223040; third, J. D. Waltemeyer & Son on Sensation Bell 1st 1221946; fourth, J. D. Waltemeyer & Son on Sensation Bell 2d 1221948; fifth, Donald Wensel on Don's Sensation 1st 1221938; sixth, McKee Bros. on Pathfinder Pet; seventh, Lester Leonard on Pilots Rose 1st.

Senior Champion Boar ($10)—J. A. Vipond & Sons on Sensation King 359231.

Junior Champion Boar ($10)—Bert Holmes on Sensation Jack 455099.



SENSATION KING

Grand Champion Duroc Boar. J. A. Vipond & Sons, Algona, Iowa.

Grand Champion Boar, Any Age ($15)—J. A. Vipond & Sons on Sensation King 359231.

Senior Champion Sow ($10)—McKee Bros. on M. B. Giantess.

Junior Champion Sow ($10)—W. W. Lockridge on Lady 1223042.

Grand Champion Sow, Any Age ($15)—McKee Bros. on M. B. Giantess.

Aged Herd, Owned by Exhibitor ($15, $12, $8, $6, $4, $3, $2)—First, J. D. Waltemeyer & Son; second, Hanks, Bishop & Droz; third, McKee Bros ; fourth, J. M. Brockway; fifth, Jones & Lengeman; sixth, Thompson & Zellmer; seventh, U. S. Indian School.

Aged Herd, Owned and Bred by Exhibitor ($15, $12, $8, $6, $4, $3)—First, McKee Bros.; second, Jones & Lengeman; third, U. S. Indian School; fourth, Jones & Lengeman; fifth, Fred Bonnesen; sixth, A. E. Mallory.

Young Herd, Owned by Exhibitor ($15, $12, $8, $6, $4, $3, $2)—First, Hanks, Bishop & Droz; second, W. W. Lockridge; third, J. D. Waltemeyer & Son; fourth, J. D. Waltemeyer & Son; fifth, Bert Holmes; sixth, Aloysius McKee; seventh, Jones & Lengeman.

Young Herd, Owned and Bred by Exhibitor ($15, $12, $8, $6, $4, $3, $2)—First, W. W. Lockridge; second, J. D. Waltemeyer & Son; third, J. D. Waltemeyer & Son; fourth, McKee Bros.; fifth, Jones & Lengeman; sixth, Thompson & Zellmer; seventh, Bert Holmes.

Get of Sire ($15, $12, $8, $6, $4, $3, $2)—First, McKee Bros.; second, Hanks, Bishop & Droz; third, J. D. Waltemeyer & Son; fourth, Hanks, Bishop & Droz; fifth, W. W. Lockridge; sixth, U. S. Indian School; seventh, J. D. Waltemeyer & Son.

Produce of Sow ($15, $12, $8, $6, $4, $3, $2)—First, Aloysius McKee; second, J. D. Waltemeyer & Son; third, Hanks, Bishop & Droz; fourth, W. W. Lockridge; fifth, U. S. Indian School; sixth, J. D. Waltemeyer & Son; seventh, Jones & Lengeman.

CHESTER WHITES

EXHIBITORS—A. F. Anderson, Selma; Wells B. Andrews, New London; J. L. Barber, Harlan; Chas. Barr, Ames; Lester Brand, West Liberty; W. T. Barr, Ames; B. M. Boyer & Son, Farmington; John Brauchle, Fort Dodge; Chas. T. Bronn, Webster City; Clifford Cochran, West Liberty; Fred L. Cooper, Ames; Wm. Denen, Joy, Ill.; J. L. Dickerson, Knoxville; Dale Foster, West Liberty; W. S. French & Son, Farmington; G. R. Gilbert, Prairie City; M. P. Herbert, Atlantic; George Herwehe, Monroe; Fred S. Himebauch, Estherville; E. F. Johnson, Guernsey; C. H. Jones, Oxford Junction; R. J. Jones, Iowa City; J. H. Lachmiller, Webster City; Geo. A. Lasley & Son, Selma; J. A. Loughridge & Sons, Delta; L. L. Lyle, Webster City; Mahannahs, North English; Will Michael, Selma; E. L. Nagle & Son, Deep River; Fred Newsome, North English; Edw. Niederhauser, Marshalltown; C. S. Rock, West Liberty; Arthur W. Runft, Reinbeck; Clarence Runft, Reinbeck; Elmer F. Stimmell & Son, Oxford; Albert H. Stuart, New Hall; R. B. Tubbs, Emerson; Lloyd Walters, West Liberty; Leonard Willey, Menlo; R. E. Williams, Iowa City.

JUDGE.............................CHAS. A. MARKER, Auburn, Ill.

Aged Boar ($15, $12, $10, $8, $6, $4, $3, $2)—First, G. R. Gilbert on Big Improver 96137; second, W. T. Barr on Big Joe's Monster 98535; third, John Brauchle on Scottlea Man O'War 106887; fourth, L. L. Lyle on Giant Model 99361; fifth, B. M. Boyer & Son on Gem the Giant 20287; sixth, M. P. Herbert on Aviator 75733; seventh, Leonard Willey on High Back Defender 220043.

Senior Yearling Boar ($15, $12, $10)—First, Fred Newsome on Modern Giant 116413; second, Albert H. Stuart on Iowan's Pilot 105539; third, L. L. Lyle on White Giant C. 220775.

Junior Yearling Boar ($15, $12, $10, $8, $6, $4, $3, $2)—First, J. L. Dickerson on Big Iowan 105541; second, J. L. Barber on Bayardsdale Prince 119681; third, Leonard Willey on Defender 1st 105185; fourth, J. H. Lachmiller on Western King 106017; fifth, R. B. Tubbs on Alfalfa Promoter 108805; sixth, Geo. Herewehe on Prairie Boy 111985; seventh, W. T. Barr on Sensation's Prince 105649; eighth, R. E. Williams on Bonnie's Favorite 105787.

Senior Boar Pig ($15, $12, $10, $8, $6, $4, $3, $2)—First, Mahannahs on Bim O. K. 222195; second, G. R. Gilbert on High Boy 220879; third, W. T. Barr on Hiland Critic 109649; fourth, W. T. Barr on Big Leader 109653; fifth, Wells B. Andrews on Wakawa 221285; sixth, B. M. Boyer & Sons on True Type 220915; seventh, L. L. Lyle on Lyle's Model 220771; eighth, John Brauchle on Long Bone Buster 221637.

Junior Boar Pig ($15, $12, $10, $8, $6, $4, $3, $2)—First, Mahannahs on O. K.'s G. I. I. 221089; second, B. M. Boyer & Sons on Leading Type 10th 220903; third, Mahannahs on O. K.'s Speed Limit 221083; fourth, J. L. Dickerson on Iowa Mogul 224721; fifth, C. S. Rock on Silver Chimes 221785; sixth, W. T. Barr on The Rambler 221917; seventh, J. L. Dickerson on Iowa Advance 224723; eighth, G. R. Gilbert on Big Giant 220873.

Aged Sow ($15, $12, $10, $8, $6, $4, $3, $2)—First, Arthur W. Runft on Big Lady 1st 218934; second, B. M. Boyer & Son on Mona 10th 34838; third, J. L. Dickerson on Lady Giantess 244860; fourth, Chas. F. Brown on Onega's Best 183776; fifth, Chas. F. Brown on Alfalfa Lady 177888; sixth, G. R. Gilbert on Prairie Princess 230344; seventh, W. T. Barr on Ethel Bell 221320; eighth, John Brauchle on Soldier Creek Surprise 153162.

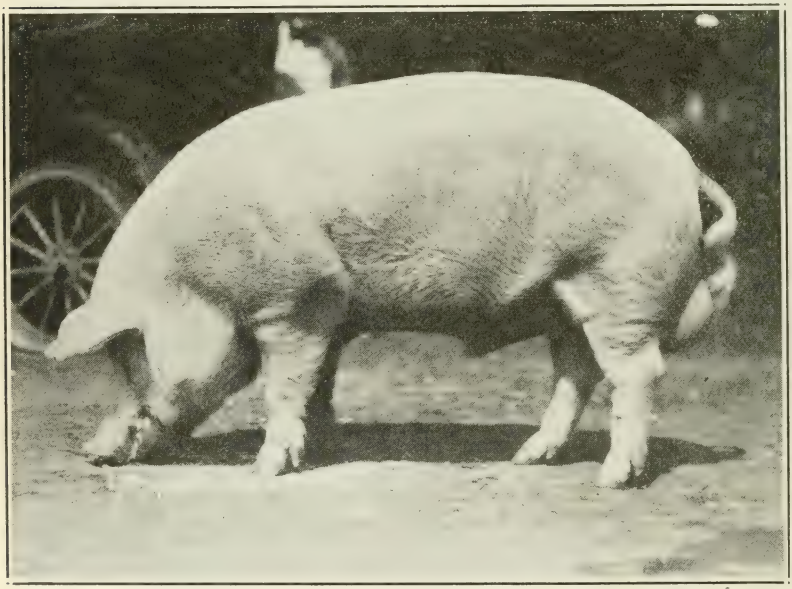
Senior Yearling Sow ($15, $12, $10, $8, $6, $4)—First, Wells B. Andrews on O. K.'s W. P. 3rd 246582; second, R. B. Tubbs on Tubbs Princess 275098; third, W. T. Barr on Miss Model 269864; fourth, John Brauchle on Miss Over The Top 285106; fifth, R. E. Williams on Big Doll 286152; sixth, B. M. Boyer & Sons on Combination Lady 2d 273574.

Junior Yearling Sow ($15, $12, $10, $8, $6, $4, $3, $2)—First, Arthur W. Runft on Giantess A. 273310; second, B. M. Boyer & Son on Ideal Type 283356; third, W. T. Barr on Model Girl 5th 256804; fourth, B. M. Boyer & Son on Lady Advance 2d 244764; fifth, G. R. Gilbert on Miss Improver 246752; sixth, W. T. Barr on Highland Lady 8th 256800; seventh, Arthur W. Runft on Giantess B. 273316; eighth, R. E. Williams on Goldie 246504.

Senior Sow Pig ($15, $12, $10, $8, $6, $4, $3, $2)—First, J. L. Barber on J. L.'s Delight 283882; second, W. T. Barr on Big Lady 256806; third, B. M. Boyer & Son on Princess L's Type 283346; fourth, Arthur W. Runft on Buster Lady 1st 281496; fifth, R. E. Williams on Rainbow Sall 287672; sixth, Wells B. Andrews on Elnora A. 283662; seventh, Mahannahs on Smiles 283768; eighth, G. R. Gilbert on High Girl 283290.

Junior Sow Pig ($15, $12, $10, $8, $6, $4, $3, $2)—First, C. S. Rock on Miss Chimes 1st 283668; second, W. T. Barr on Lady Marie III 285594; third, Albert H. Stuart on Pilots Princess 283990; fourth, J. L. Dickerson on Iowa Princess 294564; fifth, Mahannahs on O. K.'s W. P. 6th 283776; sixth, C. S. Rock on Miss Chimes 2d 283670; seventh, Albert H. Stuart on Pilots Princess 2d 283992; eighth, W. T. Barr on Lady II 285592.

Senior Champion Boar ($10)—Fred Newsome on Modern Giant 116413.



MODERN GIANT
Grand Champion Chester White Boar. Fred Newsome, North English, Iowa.

Junior Champion Boar ($10)—Mahannahs on Bim O. K.

Grand Champion Boar, Any Age ($10)—Fred Newsome on Modern Giant 116413.

Senior Champion Sow ($10)—Wells B. Andrews on O. K.'s W. P. 3rd 246582.

Junior Champion Sow ($10)—J. L. Barber on J. L.'s Delight 283882.

Grand Champion Sow, Any Age ($10)—Wells B. Andrews on O. K.'s W. P. 3rd 246582.

Aged Herd, Owned by Exhibitor ($15, $12, $10, $8, $7, $5, $4, $3)—First, G. R. Gilbert; second, B. M. Boyer & Son; third, W. T. Barr; fourth, Arthur W. Runft; fifth, Chas. F. Brown; sixth, R. E. Williams; seventh, John Brauchle; eighth, Leonard Willey.

Aged Herd, Owned and Bred by Exhibitor ($15, $12, $10, $8, $7)—First, B. M. Boyer & Sons; second, W. T. Barr; third, John Brauchle; fourth, Leonard Willey; fifth, Arthur W. Runft.

Young Herd, Owned by Exhibitor ($15, $12, $10, $8, $7, $5, $4, $3)—First, Mahannahs; second, C. S. Rock; third, B. M. Boyer & Son; fourth, W. T. Barr; fifth, Arthur W. Runft; sixth, Wells B. Andrews; seventh, G. R. Gilbert; eighth, Albert H. Stuart.

Young Herd, Owned and Bred by Exhibitor ($15, $12, $10, $8, $7, $5, $4, $3)—First, Mahannahs; second, C. S. Rock; third, B. M. Boyer & Sons; fourth, W. T. Barr; fifth, Arthur W. Runft; sixth, G. R. Gilbert; seventh, Albert H. Stuart; eighth, L. L. Lyle.

Get of Sire ($15, $12, $10, $8, $7, $6, $5, $4)—First, Mahannahs; second, Mahannahs; third, B. M. Boyer & Sons; fourth, W. T. Barr; fifth, C. S. Rock; sixth, W. T. Barr; seventh, Arthur W. Runft; eighth, G. R. Gilbert.

Produce of Sow ($15, $12, $10, $8, $7, $6, $5, $4)—First, Mahannahs; second, B. M. Boyer & Sons; third, W. T. Barr; fourth, C. S. Rock; fifth, W. T. Barr; sixth, G. R. Gilbert; seventh, Arthur W. Runft; eighth, Wells B. Andrews.

HAMPSHIRES

EXHIBITORS—Chas. Baldwin, Gladbrook; Carroll Bennett, Dexter; Verle Bennett, Dexter; Walter Berkhiser, Mt. Pleasant, R. F. D. 3; Bockleman & Mills, Sioux City; C. S. Bratt & Son, Arapahoe, Neb.; P. P. Ceders, Genoa, Neb.; B. G. Chaplin & Son, Mt. Sterling; Hendrickson & Lang Bros., Brooklyn; E. L. Hem, Selma; Chas. Hibbs, Le Grand; Ralph Hibbs, Le Grand; L. T. Hibbs, Le Grand; N. B. Hoskins & Son, Cantril; Howard Hunt, Redfield; Merrill Hunt, Redfield; Burton F. Huston, Waukee; Johnson & Christianson, Genoa, Neb.; E. E. Johnson, Genoa, Neb.; Chas. Kelly & Sons, Iowa City, R. F. D. 7; Clarence Kruse, West Liberty; Leland Keen, Le Grand; Oscar Klein, Alden; E. D. Lawson & Sons, Ravenwood, Mo.; Levson Bros., Wyoming; Lewis Bros. & DeKalb, Osceola; Dorel Miller, Muscatine; Mahaffa & McConnell, Waukee, R. F. D. 1; H. G. Manuel & Son, Center Junction; Meier Bros., Melbourne; C. M. Merkley, Sac City; Clayton Messenger, Keswick; M. C. Morrison, Adelphi; Edwin Nay, West Liberty; Ray C. Peet, Martelle; R. L. Pemberton, Le Grand; Merrill Radloff, Le Grand; A. M. Railsbach, Griswold; Harold Robinson, Rhodes; Carl Rylander, Le Grand; J. M. Sanders, Hartley; Will Sargent, Brooklyn; L. E. and Marie Sipple, Kalona; Art Shaw, Oskaloosa, R. F. D. 2; Ed Steffens, Lowden; Frank W. Talbott, Selma; F. W. Timmerman, West Liberty; Julius Timmerman, West Liberty; Elmer Tow, Martelle; Boyd G. Weidlein, Webster City; Albert Weiss, Denison; Walter Weiss, Denison; Wickfield Farms, Cantril; W. F. Yongst & Son, State Center; Julius Zimmerman, West Liberty.

JUDGE..............................T. A. FLENNER, Ashmore, Ill.

Aged Boar ($18, $15, $10, $9, $8, $7, $6, $5)—First, Mahaffa & McConnell on The Peer 81521; second, Wickfield Farms on Lookout Quicksilver

80089; third, C. M. Merkey on The Pilot 86515; fourth, F. W. Timmerman on Wickware Tommey 58193; fifth, B. G. Chaplin & Son on Lookout Woodrow 103799; sixth, Art Shaw on Rainbow Kink 96675; seventh, Levsen Bros. on Villager Lad 99075; eighth, P. P. Cedar on Nebraska King 80305.

Senior Yearling Boar ($18, $15, $10, $9, $8, $7, $6, $5)—First, H. G. Manuel & Sons on Prince Tommy 101055; second, Clayton Messenger on Hawkeye Col. 103081; third, Lewis Bros. & DeKalb on DeKalbs King 202d 118743; fourth, Wickfield Farms on Lookout Giant 114145; fifth, Albert Weiss on Ia. Lad Jr. 103013; sixth, F. W. Timmerman on D. K. King's Pal 103837; seventh, Charles Kelley & Sons on Tommy Boy 103319; eighth, C. M. Merkey on Cavilier Lad 103285.

Junior Yearling Boar ($18, $15, $10, $9, $8, $7, $6, $5)—First, Chas. Kelly & Sons on Monarch's Defender 103327; second, Wickfield Farms on Wickware Radio 119107; third, O. T. Klein on Hawkeye Side Light 113175; fourth, Boyd G. Weidlein on Lookout Starlight's Lad 102865; fifth, C. M. Merkey on Big Bone Equal 119485; sixth, Levsen Bros. on Lookout La Salle 120289; seventh, Clayton Messenger on Masterpiece 106839; eighth, Meier Bros. on Wickware Giant 104323.

Senior Boar Pig ($18, $15, $10, $9, $8, $7, $6, $5)—First, F. W. Timmerman on W. T. Charmer 120499; second, Levsen Bros. on Lookout Dale 118783; third, F. W. Timmerman on Royal Cherokee Jr. 120505; fourth, J. M. Sanders on Giant Jr. Again 119343; fifth, Hendrickson & Lang on Pershing Advocate 120015; sixth, Chas. Kelly & Sons on Busy American 121065; seventh, C. S. Bratt & Son on Bratt & Autlers King 15th 118411; eighth, Wickfield Farms on Lookout Ridgeway 120569.

Junior Boar Pig ($18, $15, $10, $9, $8, $7, $6, $5)—First, Chas. Kelly & Sons on Jack Defender 121067; second, J. M. Sanders on Goliath 120059; third, M. C. Morrison on Morrell's Ace 119731; fourth, Will Sargent on Today's Marvel 120021; fifth, Backelman & Mills on Tommie Donuno; sixth, Chas. Kelly & Sons on Defender's Rival 121069; seventh, J. M. Sanders on Giant W. 119335; eighth, F. W. Timmerman on Royal Defender 120507.

Aged Sow ($18, $15, $10, $9, $8, $7, $6, $5)—First, J. M. Sanders on Minnie 3d 223490; second, J. M. Sanders on Minnie 9th 223502; third, Wickfield Farms on Inez Wickware 182334; fourth, F. W. Timmerman on Miss Rexetta 219848; fifth, Wickfield Farms on Roxy May Lookout 212116; sixth, C. M. Merkey on Maple Wood Maid 237030; seventh, L. T. Hibbs on Lettie 207560; eighth, Boyd G. Weidlein on Flora Tipton Starlight 245708.

Senior Yearling Sow ($18, $15, $10, $9, $8, $7, $6, $5)—First, Elmer Tow on Ruby Parole 251614; second, C. M. Merkey on Iowa Priness 251578; third, F. W. Timmerman on Sarah 253100; fourth, Wickfield Farms on Lookout Fancy 251824; fifth, Boyd G. Weidlein on Favorite Starlight 245706; sixth, Chas. Kelly & Sons on Lieutenant Caroline 251650; seventh, Johnson & Christenson on Silver Queen I Am 6th 251904; eighth, E. E. Johnson & Son on Silver Queen I Am 7th 251906.

Junior Yearling Sow ($18, $15, $10, $9, $8, $7, $6, $5)—First, Chas. Kelly & Sons on Giant Jane 251652; second, Hendrickson & Lang on Pershing's Queen 304388; third, Boyd G. Weidlein on Favorite's Best 250286; fourth, Hendrickson & Lang on Pershing's Lady 304386; fifth, Boyd G. Weidlein on Lookout Starlight's Lady 250292; sixth, Chas. Kelly & Sons on Cherokee Pet 6th 268184; seventh, Elmer Tow on Grace Parole 251624; eighth, F. W. Timmerman on Model's Pride 253108.

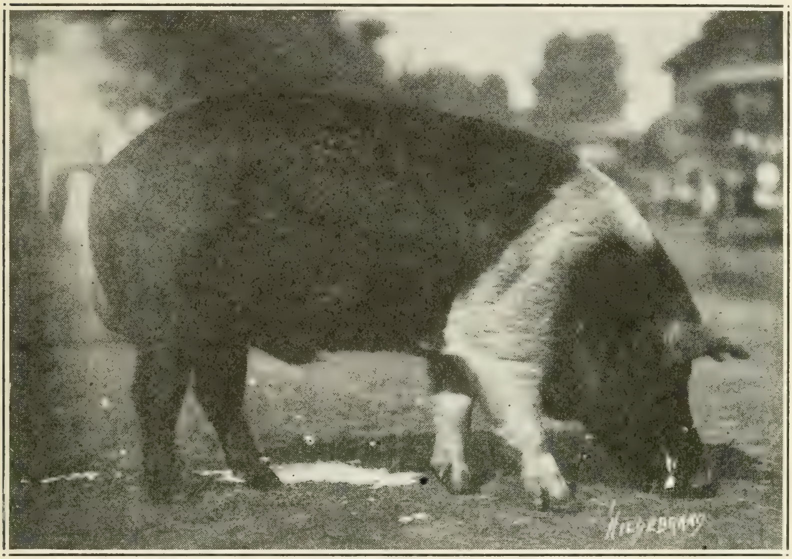
Senior Sow Pig ($18, $15, $10, $9, $8, $7, $6, $5)—First, Wickfield Farms on Lookout Melba 306046; second, F. W. Timmerman on Miss Rose Bud 305772; third, Wickfield Farms on Lookout Roseland 306052; fourth, Hendrickson & Lang on Topsy Again 304120; fifth, R. L. Pemberton on Sioux Maid 304502; sixth, Levsen Bros. on Lookout Pauline 305056; seventh, Chas. Kelly & Sons on Betty Lass 307478; eighth, C. S. Bratt & Son on Bratt's Queen 15th 298892.

Junior Sow Pig ($18, $15, $10, $9, $8, $7, $6, $5)—First, Julius Timmerman on Miss Rainbow 305778; second, Merrill Hunt on Merry Girl; third, Wickfield Farms on Winnie Wickware 306826; fourth, M. C. Morrison on Morrel's Lady 303600; fifth, Chas. Kelly & Sons on Wayward Lady 307484; sixth, Viola Yongst on Miss Longfellow 2d; seventh, F. W. Timmerman on Royal's Girl 305762; eighth, M. C. Morrison on Maud's Best 303596.

Senior Champion Boar ($10)—H. G. Manuel & Sons on Prince Tommy 101055.

Junior Champion Boar ($10)—F. W. Timmerman on W. T. Charmer 120499.

Grand Champion Boar, Any Age ($10)—H. G. Manuel & Son on Prince Tommy 101055.



PRINCE TOMMY

Grand Champion Hampshire Boar. H. G. Manuel & Son, Center Junction, Iowa.

Senior Champion Sow ($10)—Chas. Kelly & Sons on Giant Jane 251652.

Junior Champion Sow ($10)—Julius Timmerman on Miss Rainbow 305778.

Grand Champion Sow, Any Age ($10)—Chas. Kelly & Sons on Giant Jane 251652.

Aged Herd, Owned by Exhibitor ($20, $15, $12, $10, $8, $7, $6, $5)—First, Chas. Kelly & Sons; second, Wickfield Farms; third, F. W. Timmerman; fourth, Wickfield Farms; fifth, C. M. Merkey; sixth, Hendrickson & Lang; seventh, Boyd G. Weidlein; eighth, Elmer Tow.

Aged Herd, Owned and Bred by Exhibitor ($20, $15, $12, $10, $8, $7, $6, $5)—First, Wickfield Farm; second, F. W. Timmerman; third, C. M. Merkey; fourth, Hendrickson & Lang; fifth, Boyd G. Weidlein; sixth, Elmer Tow; seventh, Clayton Messenger; eighth, J. M. Sanders.

Young Herd, Owned by Exhibitor ($20, $15, $12, $10, $8, $7, $6, $5)—First, F. W. Timmerman; second, Wickfield Farm; third, M. C. Morrison; fourth, Chas. Kelly & Sons; fifth, Julius Timmerman; sixth, J. M. Sanders; seventh, C. S. Bratt & Son; eighth, F. W. Timmerman.

Young Herd, Owned and Bred by Exhibitor ($20, $15, $12, $10, $8, $8, $8, $6)—First, F. W. Timmerman; second, Wickfield Farm; third, M. C. Morrison; fourth, Chas. Kelly & Sons; fifth, J. M. Sanders; sixth, C. S. Bratt & Son; seventh, F. W. Timmerman; eighth, Levson Bros.

Get of Sire ($20, $15, $12, $10, $8, $8, $8, $6)—First, F. W. Timmerman; second, Chas. Kelly & Sons; third, Wickfield Farm; fourth, Hendrickson & Lang; fifth, M. C. Morrison; sixth, Boyd G. Weidlein; seventh, Elmer Tow; eighth, J. M. Sanders.

Produce of Sow ($20, $15, $12, $10, $8, $8, $8, $6)—First, Eimer Tow; second, Julius Timmerman; third, Wickfield Farm; fourth, J. M. Sanders; fifth, Boyd G. Weidlein; sixth, M. C. Morrison; seventh, C. S. Bratt & Son; eighth, Clayton Messenger.

SPECIAL PRIZES.

Offered by the Iowa Hampshire Breeders' Association.

Best Pair of Pigs, Under Six Months ($25, $20, $15, $10, $5, $3, $2)—First, Julius Timmerman; second, Chas. Kelly & Sons; third, M. C. Morrison; fourth, Levsen Bros.; fifth, Wickfield Farms; sixth, Boyd G. Weidlein; seventh, F. W. Timmerman.

Four Pigs, Any Sex, Under Six Months ($25, $20, $15, $10, $5, $3 $2)—First, M. C. Morrison; second, Chas. Kelly & Sons; third, Julius Timmerman; fourth, Wickfield Farms; fifth, Boyd G. Weidlein; sixth, F. W. Timmerman; seventh, Levsen Bros.

SPOTTED POLAND CHINAS.

EXHIBITORS—L. R. Barton, Bondurant; Carl I. Bingley, Carlisle; Blanke Bros., Taintor; Frank Bragdon, Route No. 1, Ankeny; Wm. Buchanan, Adel; Clyde L. Burkett, Minburn; Robt. Butler, Prairie City; Donald Clayton, Waukee; Verne Clayton, Waukee; Ivan Compton, Dexter; Dauley Bros., Prairie City; R. W. Davisson, North English; W. W. Davisson & Sons, Wellman; H. A. Dunlap, Williamsburg; C. B. Evitt, Menlo; J. C. Freel, Runnells; Earl Fry, Iowa City; Fred Goetry, Russell; T. M. Hayden, Creston; Foss O. Heaton, Shannon City; F. L. Jackson, Yetter; Bliss James, Carlisle; A. Lamas, Plano; Laughlin & Co., 219 Adams St., Creston; D. L. Millsap, Powersville, Mo.; Moore & Miller, Belton, Mo.; Geo. B. Morrison, Batavia; Glen Mortimer, Minburn; C. C. Nichols, Prairie City; Richard Olsen, Adel; Vernon R. Olson, Dunbar; Paul A. Palmer, What Cheer; Reinert & Son, Harper; Shaver & Fry, Kalona; John T. Sutliff, Huntsville, Mo.; Taylor & Taylor, What Cheer; J. O. Van Devender, Adel; J. P. Williams, Springville.

JUDGE..........................CLAYTON MESSENGER, Keswick, Iowa.

Aged Boar ($20, $15, $12, $10, $9, $8, $7, $6)—First, Taylor & Taylor on Giant Improver 16533; second, Wm. Reinert & Son on Up English Buster 33863; third, Earl Fry on English Pathfinder 33857; fourth, Blanke Bros. on Arch Back Master 46635; fifth, Paul A. Palmer on English Buster 33865; sixth, Shaver & Fry on Buster Bill 31689; seventh, L. P. Townsend on Carmine's Arch Back 1st 32399; eighth, W. W. Davisson & Sons on Ranger's Pride 36145.

Senior Yearling Boar ($20, $15, $12, $10, $9, $8, $7)—First, T. M. Hayden on English Extreme Type 53573; second, Carl I. Bingley on Repeater 46639; third, G. B. Morrison on Spotted Joe 2d 53949; fourth, Danley Bros. on F.'s Crystal 53813; fifth, H. A. Dunlap on Arch Back Chanclor; sixth, C. B. Evitt on Duke's Chief 60431; seventh, D. S. Millsap on American Arch Back 54729.

Junior Yearling Boar ($20, $15, $12, $10, $9, $8, $7, $6)—First, Taylor & Taylor on Arch Back Rainbow King 57823; second, Bliss James on The Highlander 68945; third, C. B. Evitt on Peerless Giant 64151; fourth, Shaver & Fry on Pathmaster 61921; fifth, A. Lamas on The Marnel's Im'p. Wonder 69107; sixth, Blanke Bros. on Perfect Marvel 68401; seventh, Elmer E. Strimmel on English Booster; eighth, H. A. Dunlap on Dunlap's Arch Back.

Senior Boar Pig ($20, $15, $12, $10, $9, $8, $7, $6)—First, Earl Fry on English Improver; second, Taylor & Taylor on T.'s Masterpiece 68247;

third, Taylor & Taylor on Creator 64871; fourth, Bliss James on Marnel's Supreme 68949; fifth, Danley Bros. on Gay Booster 70343; sixth, Shaver & Fry on Silver Spot 67229; seventh, H. A. Dunlap on Type Promotor; eighth, C. B. Evitt on Argonaut.

Junior Boar Pig ($20, $15, $12, $10, $9, $8, $7, $6)—First, Earl Fry on Royal Pathfinder; second, W. W. Davisson & Sons on Supreme Lad 68833; third, Earl Fry on Pathfinders Equal; fourth, Fred Goltry on Yankee Doodle 69013; fifth, Fred Goltry on Syracuse 69009; sixth, Shaver & Fry on English Harvester 67437; seventh, L. R. Barton on Pickett King's Pride 68581; eighth, W. W. Davisson & Sons on Pilot's Orange 68831.

Aged Sow ($20, $15, $12, $10, $9, $8, $7, $6)—First, Paul A. Palmer on Clanmaster Kind 113820; second, Paul A. Palmer on Clanmaster Type 113818; third, Taylor & Taylor on Giant's Buster Masterpiece 79702; fourth, Earl Fry on Duke's Giantess 77488; fifth, Shaver & Fry on English Maid I 90984; sixth, C. B. Evitt on O Bena 45th 76830; seventh, R. W. Davission on Spotted Giantess 118810; eighth, W. W. Davisson & Sons on Pilot Queen 147446.

Senior Yearling Sow ($20, $15, $12, $10, $9, $8, $7, $6)—First, Taylor & Taylor on Corrector's Giantess 198182; second, W. W. Davisson & Sons on Pilot Lady 198994; third, Taylor & Taylor on North 154932; fourth, Shaver & Fry on F.'s Julien 164548; fifth, George B. Morrison on Big Susan 194934; sixth, R. Laughlin & Co. on High Spot Maid 187608; seventh, R. Laughlin & Co. on Dolly Dimple 141582; eighth, Earl Fry on Miss English 141298.

Junior Yearling Sow ($20, $15, $12, $10, $9, $8, $7, $6)—First, Taylor & Taylor on Designer's Giantess 198186; second, Clyde L. Burkett on Lady Bell 194462; third, Shaver & Fry on Spotted Maid IV 194184; fourth, Taylor & Taylor on Lady Pickett 141704; fifth, C. B. Evitt on Lady La Fayette; sixth, J. C. Freel on Defiandt Pickets Lady 177464; seventh, W. W. Davisson & Sons on Miss Challenger 198998; eighth, A. Lamas on King's Girl 159572.

Senior Sow Pig ($20, $15, $12, $10, $9, $8, $7, $6)—First, Earl Fry on Miss Royal; second, Taylor & Taylor on Taylor's Sunbeam 187456; third, Earl Fry on Miss Royal 1st; fourth, J. R. Crozier on English Giantess I 199044; fifth, Taylor & Taylor on Creatoress 200760; sixth, Frank Bragdon on Spotted Princess 199188; seventh, A. Lamas on The Marnel's Im'p. Lady II 200930; eighth, C. B. Evitt on English Grace.

Junior Sow Pig ($20, $15, $12, $10, $9, $8, $7, $6)—First, Earl Fry on Miss Giantess; second, Shaver & Fry on Harvester's Lady II 194578; third, Robert Butler on Blue Eyed Girl; fourth, W. W. Davisson & Sons on Miss Supreme 199502; fifth, Fred Goltry on Xylene 199956; sixth, A. Lamas; seventh, Blanke Bros. on Blanke's Beauty 199480; eighth, R. Laughlin on Pearl Doll.

Senior Champion Boar ($10)—Taylor & Taylor on Giant Improver 16533.

Junior Champion Boar ($10)—Earl Fry on Royal Pathfinder.

Grand Champion Boar, Any Age ($10)—Taylor & Taylor on Giant Improver 16533.

Senior Champion Sow ($10)—Taylor & Taylor on Designer's Giantess 198186.

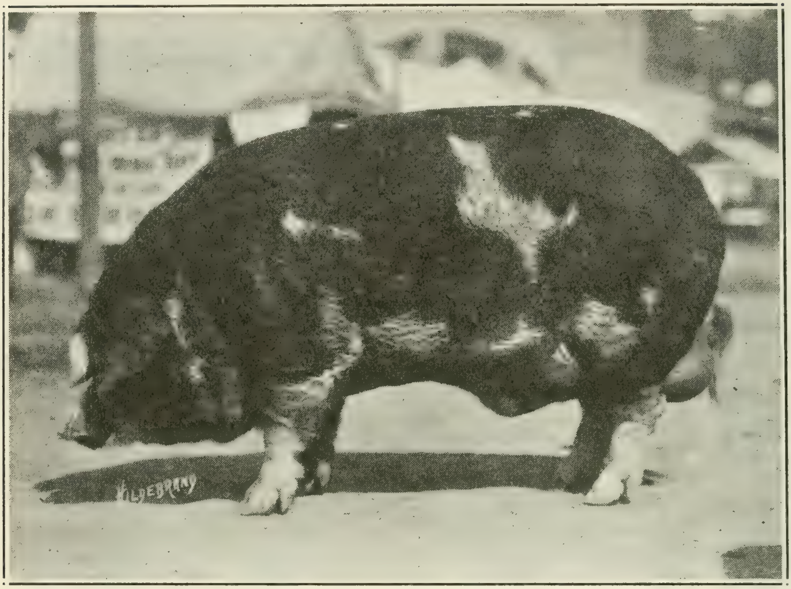
Junior Champion Sow ($10)—Earl Fry on Miss Royal.

Grand Champion Sow, Any Age ($10)—Taylor & Taylor on Designer's Giantess 198186.

Aged Herd, Owned by Exhibitor ($25, $20, $15, $12, $10, $10, $10, $10)—First, Taylor & Taylor; second, Taylor & Taylor; third, Paul A. Palmer; fourth, Shaver & Fry; fifth, Earl Fry; sixth, W. W. Davisson & Sons; seventh, A. Lamas; eighth, R. Laughlin & Co.

Aged Herd, Owned and Bred by Exhibitor ($25, $20, $15, $12)—First, Taylor & Taylor; second, Shaver & Fry; third, Taylor & Taylor; fourth, R. Laughlin & Co.

Young Herd, Owned by Exhibitor ($25, $20, $15, $12, $10, $10 $10, $8)—First, Earl Fry; second, Earl Fry; third, Taylor & Taylor; fourth, W. W.



GIANT IMPROVER
Grand Champion Spotted Poland China Boar. Taylor & Taylor, What Cheer, Iowa.

Davisson & Sons; fifth, C. B. Evitt; sixth, Paul A. Palmer; seventh, Blanke Bros.; eighth, H. A. Dunlap.

Young Herd, Owned and Bred by Exhibitor ($25, $20, $15, $12, $10, $10, $10, $10)—First, Earl Fry; second, Earl Fry; third, Taylor & Taylor; fourth, W. W. Davisson & Sons; fifth, C. B. Evitt; sixth, Paul A. Palmer; seventh, Blanke Bros.; eighth, H. A. Dunlap.

Get of Sire ($25, $20, $15, $12, $10, $10, $10, $10)—First, Earl Fry; second, Earl Fry; third, Taylor & Taylor; fourth, W. W. Davisson & Sons; fifth, A. Lamas; sixth, Shaver & Fry; seventh, T. M. Hayden; eighth, W. W. Davisson & Sons.

Produce of Sow ($25, $20, $15, $12, $10, $10, $10, $10)—First, Earl Fry; second, Taylor & Taylor; third, W. W. Davisson & Son; fourth, A. Lamas; fifth, Shaver & Fry; sixth, W. W. Davisson & Sons; seventh, C. B. Evitt; eighth, R. Laughlin & Co.

BERKSHIRES.

EXHIBITORS—Clarence Dickerson, Dallas Center; Rookwood Farm, Ames.

JUDGE.................................F. F. SILVER, Cantril, Iowa.

Aged Boar ($10)—First, Rookwood Farm on Laurel Leader 314000.

Junior Yearling Boar ($8)—First, Rookwood Farm on Ames Rival 224 304240.

Senior Boar Pig ($8)—First, Rookwood Farm on Ames Laurel 9th 313046.

Junior Boar Pig ($8, $6, $4, $2)—First, Rookwood Farm on Lord Rival; second, Clarence Dickerson on Dickerson's Model; third, Clarence Dickerson on Dickerson's Model 2d; fourth, Rookwood Farm on Lord Rival 2d.

Aged Sow ($10)—First, Rookwood Farm on Rookwood Lady 178, 303612.

Senior Yearling Sow ($10)—First, Rookwood Farm on Winona Laurel Lady 300043.

Junior Yearling Sow ($8, $6)—First, Rookwood Farm on Ames Lady 3d 312643; second, Rookwood Farm on Ames Lady 4th 312644.

Senior Sow Pig ($8)—First, Rookwood Farm on Rookwood Nina 313045.

Junior Sow Pig ($8, $6, $4, $2)—First, Clarence Dickerson on Dickerson's Model Girl; second, Clarence Dickerson on Dickerson's Model Girl 2d; third, Rookwood Farm on Ames Lady 6th; fourth, Rookwood Farm on Ames Lady 7th.

Senior Champion Boar ($5)—Rookwood Farm on Laurel Leader 314000.

Junior Champion Boar ($5)—Rookwood Farm on Lord Royal 3d.

Grand Champion Boar, Any Age ($5)—Rookwood Farm on Laurel Leader 314000.

Senior Champion Sow ($5)—Rookwood Farm on Rookwood Lady 178th 303612.

Junior Champion Sow ($5)—First, Clarence Dickerson on Dickerson's Model 2d.

Grand Champion Sow, Any Age ($5)—Rookwood Farm on Rookwood Lady 178, 303612.

Aged Herd, Owned by Exhibitor ($10)—First, Rookwood Farm.

Aged Herd, Owned and Bred by Exhibitor ($10)—First, Rookwood Farm.

Young Herd, Owned by Exhibitor ($10)—First, Rookwood Farm.

Young Herd, Owned and Bred by Exhibitor (10)—First, Rookwood Farm.

Get of Sire ($10, $7)—First, Rookwood Farm; second, Clarence Dickerson.

Produce of Sow ($10, $7)—First, Rookwood Farm; second, Clarence Dickerson.

TAMWORTHS.

EXHIBITORS—A. E. Augustine, Rose Hill; Chas. Barr, R. 4, Ames; Jas. E. Crum, Dallas City, Ill.; Robt. Davis, Iowa City; C. A. Garrett, La Harpe, Ill.; L. B. Graham, Cedar Rapids; B. F. Harris Farms, Seymour, Ill.; H. E. Herrington & Son, R. 1, Dysart; Joy & Hunter, Ames; J. W. Justice & Son, R. 7, Iowa City; J. B. Mackoy, Farragut; David S. Murphy, Ames; H. S. Murphy & Sons, Ames; Nield Bros., Ogden; D. M. Overholt, Iowa City; Overholt Sisters, Iowa City; Probst Bros., Iowa City; A. T. Roberts, State Center; Art Shaw, R. 2, Oskaloosa; Snyder & Snyder, Oskaloosa; Clair Terrill, Redfield; Linene Terrill, Redfield; E. O. Thomas & Son, R. 2. Iowa City; W. A. Thomas & Son, R. 2, Iowa City; D. E. Yoder, Williamsburg.

JUDGE................................C. C. ROUP, Iowa City, Iowa.

Aged Boar ($15, $10, $8, $7, $5, $3, $2)—First, A. E. Augustine on Rose Hill Anchor 25277; second, W. A. Thomas & Son on Glenary Quaker 24546; third, Jas. E. Crum on Fairview Prince 25044; fourth, J. W. Justice & Sons on Anthony 23619; fifth, Snyder & Snyder on Rose Hill King 24928; sixth, D. E. Yoder on Glenary Long Boy 22046; seventh, H. E. Herrington & Sons on Ardmore Boy 24812.

Senior Yearling Boar ($15, $10, $8, $7, $5)—First, Snyder & Snyder on Home Farm King XII 25210; second, Jas. E. Crum on Home Farm Duke I 25488; third, D. E. Yoder on Big Ben 27551; fourth, C. A. Garrett on Red Buster 25370; fifth, B. F. Harris Farms on Home Farm Duke IV 25491.

Junior Yearling Boar ($15, $10, $8, $7, $5, $3, $2)—First, D. M. Overholt on Iowa Chief 26278; second, Probst Bros. on Ardmore's Giant 26132; third, Nield Bros. on Oakland Long Boy 25558; fourth, J. B. Mackoy on Perfect Lad II 25613; fifth, H. S. Murphy & Sons on Greenwood Lad II 25839; sixth, B. F. Harris Farms on Home Farm Duke XI 25508; seventh, B. F. Harris Farms on Home Farm Duke XV 25522.

Senior Boar Pig ($15, $10, $8, $7, $5, $3, $2)—First, B. F. Harris Farms on

Home Farm Prince IX 27028; second, W. A. Thomas & Son on Oak Grove Lad 27607; third, H. S. Murphy & Sons on Ames High Boy 27444; fourth, Jas. E. Crum on Plainview Red Fairview 27611; fifth, Jas. E. Crum on Fairview Hill Prince IV 27525; sixth, D. E. Yoder on Long Buster 27504; seventh, A. E. Augustine on Flowerdale Big Orange 27011.

Junior Boar Pig ($15, $10, $8, $7, $5, $3, $2)—First, Jas. E. Crum on Fairview Hill Chieftain 27537; second, J. B. Mackoy on Gold Rose Man 27353; third, Overholt Sisters on Seven Oaks Mac I 27563; fourth, B. F. Harris Farms on Home Farm Max VII 27273; fifth, Snyder & Snyder on Bernard Crescent 27491; sixth, J. B. Mackoy on Gold Rose Man II 27354; seventh, Jas. E. Crum on Fairview Hill Reveler 27645.

Aged Sow ($15, $10, $8, $7, $5, $3, $2)—First, Probst Bros. on Amilda Queen 25338; second, Jas. E. Crum on American Jass 25862; third, B. F. Harris Farms on Barbara II 24258; fourth, D. M. Overholt on Miss B I of Seven Oaks 22412; fifth, H. S. Murphy & Sons on Fanny F 25247; sixth, J. B. Mackoy on Queen O'May II 26427; seventh, Jas. E. Crum on Princess Connie 25037.

Senior Yearling Sow ($15, $10, $8, $7, $5, $3, $2)—First, A. E. Augustine on Rose Hill Bee 26016; second, A. E. Augustine on Rose Hill Rachael II 26098; third, Jas. E. Crum on Fairview Jane II 26001; fourth, B. F. Harris Farms on Lady May 25813; fifth, B. F. Harris Farms on Home Farm Duchess III 25496; sixth, J. W. Justice & Sons on Fremour Lady II 25531; seventh, Snyder & Snyder on Rose Hill Retta 27215.

Junior Yearling Sow ($15, $10, $8, $7, $5, $3, $2)—First, B. F. Harris Farms on Home Farm Duchess X 25504; second, B. F. Harris Farms on Home Farm Duchess XXXII 26244; third, Snyder & Snyder on Queen's Beauty 26496; fourth, Jas. E. Crum on Fairview Princess I 25809; fifth, D. E. Yoder on Knoll Heights Liberty 27502; sixth, Probst Bros. on Amilda of Ardmore 26385; seventh, Dr. E. O. Thomas & Son on Glenary Lela 25652.

Senior Sow Pig ($15, $10, $8, $7, $5, $3, $2)—First, W. A. Thomas & Son on Oak Grove Bess 27608; second, W. A. Thomas & Son on Oak Grove Lady 27607; third, J. B. Mackoy on Mayfield Queen I 27357; fourth, H. E. Herrington & Sons on Kate 27163; fifth, C. A. Garrett on Plainview Blanch I 27598; sixth, J. W. Justice & Sons on Hillcrest Sunshine 27408; seventh, C. A. Garrett on Plainview Blanch II 27599.

Junior Sow Pig ($15, $10, $8, $7, $5, $3, $2)—First, J. W. Justice & Sons on Greenwood Model Rose 27403; second, Overholt Sisters on Seven Oaks Vienna I 27565; third, L. B. Graham on Cedar Rose 27517; fourth, D. E. Yoder on Gay Lady 27511; fifth, J. W. Justice & Sons on Greenwood Model Rose I 27404; sixth, J. B. Mackoy on Rose Maid I 27350; seventh, Jas. E. Crum on Fairview Princess Louis 27541.

Senior Champion Boar ($10)—D. M. Overholt on Iowa Chief 26278.

Junior Champion Boar ($10)—Jas. E. Crum on Fairview Hill Chieftain 27537.

Grand Champion Boar, Any Age ($15)—D. M. Overholt on Iowa Chief 26278.

Senior Champion Sow ($10)—Probst Bros. on Amilda Queen 25338.

Junior Champion Sow ($10)—W. A. Thomas & Son on Oak Grove Bess 27608.

Grand Champion Sow, Any Age ($15)—Probst Bros. on Amilda Queen 25338.

Aged Herd, Owned by Exhibitor ($15, $12, $10, $8, $5, $3, $2)—First, D. M. Overholt; second, Probst Bros.; third, Jas. E. Crum; fourth, B. F. Harris Farms; fifth, A. E. Augustine; sixth, J. B. Mackoy; seventh, Snyder & Snyder.

Aged Herd, Owned and Bred by Exhibitor ($15, $12, $10, $8)—First, B. F. Harris Farms; second, Jas. E. Crum; third, J. B. Mackoy; fourth, A. E. Augustine.

Young Herd, Owned by Exhibitor ($15, $12, $10, $8, $5, $3, $2)—First, W. A. Thomas & Son; second, Jas. E. Crum; third, J. B. Mackoy; fourth, B. F. Harris Farms; fifth, A. E. Augustine; sixth, L. B. Graham; seventh, Overholt Sisters.

Young Herd, Owned and Bred by Exhibitor ($15, $11, $10, $8, $5, $3, $2)—First, W. A. Thomas & Son; second, Jas. E. Crum; third, J. B. Mackoy; fourth, B. F. Harris Farms; fifth, A. E. Augustine; sixth, L. B. Graham; seventh, Snyder & Snyder.

Get of Sire ($15, $12, $10, $8, $5, $3, $2)—First, W. A. Thomas & Son; second, J. B. Mackoy; third, Jas. E. Crum; fourth, B. F. Harris Farms; fifth, Overholt Sisters; sixth, L. B. Graham; seventh, A. E. Augustine.

Produce of Sow ($15, $12, $10, $8, $5, $3, $2)—First, J. B. Mackoy; second, Jas. E. Crum; third, B. F. Harris Farms; fourth, Overholt Sisters; fifth, L. B. Graham; sixth, A. E. Augustine; seventh, D. M. Overholt.

YORKSHIRES.

EXHIBITORS—Leland Beasley, Adel; Earl Caris, Minburn; B. F. Davidson, Menlo; Merle and Bennie Davidson, Menlo; L. C. Hand & Son, Center Point; Kenneth Mullins, Adel; Loren Mullins, Adel; Lennie Royer, Adel; Renz Royer, Adel; Van M. Storm, Adel; Van Meter & Englebretson, Adel; Leland Wilcox, Adel; W. H. Winn, Menlo; Mildred Zellmar, Atlantic.

JUDGE..............................C. C. ROUP, Iowa City, Iowa.

Aged Boar ($10, $7, $5)—First, B. F. Davidson on Deer Creek High Boy 29541; second, Van Meter & Englebretson on Lake Park Prince 3d 30160; third, L. C. Hand & Son on Deer Creek B. 3d 29012.

Senior Yearling Boar ($10)—First, B. F. Davidson on Deer Creek Royal 21st 29495.

Junior Yearling Boar ($8, $6)—First, B. F. Davidson on Deer Creek Romeo 34th 29611; second, B. F. Davidson on Colonel Rainbow 29700.

Senior Boar Pig ($8, $6, $4, $2)—First, B. F. Davidson on Deer Creek Royal 34th 30177; second, B. F. Davidson on Deer Creek Royal 35th 30178; third, Merle & Bennie Davidson on Deer Creek Mand B 2d 30182; fourth, Van Meter & Englebretson on Meadow Famous.

Junior Boar Pig ($8, $6, $4, $2)—First, W. H. Winn on Windale Le Roy 30207; second, W. H. Winn on Windale Lois 30206; third, Van Meter & Englebretson on Oak Lodge Famous 321st 80318 (c. r.); fourth, L. C. Hand & Son on Otter Creek Corinck 30231.

Aged Sow ($10, $7, $5)—First, L. C. Hand & Son on Oak Lodge Julia 171st 30103; second, L. C. Hand & Son on Maple Spring Queen 17th 28906; third, B. F. Davidson on Deer Creek Della 34th 29159.

Senior Yearling Sow ($10, $7, $5)—First, B. F. Davidson on Deer Creek Rosa 8th 29544; second, B. F. Davidson on Deer Creek Ruby 16th 29508; third, Merle & Bennie Davidson on Deer Creek Rena B 2 29503.

Junior Yearling Sow ($8, $6, $4, $2)—First, B. F. Davidson on Deer Creek Ruby 18th 29608; second, B. F. Davidson on Deer Creek Ruby 17th 29607; third, Van Meter & Englebretson on Oak Lodge Princess 467, 29962; fourth, Van Meter & Englebretson on Oak Lodge Princess 465, 29960.

Senior Sow Pig ($8, $6, $4, $2)—First, B. F. Davidson on Deer Creek Elena 28th 30179; second, Van Storm on Violet's Girl; third, B. F. Davidson on Deer Creek Elena 29th 30180; fourth, L. C. Hand & Son on Otter Creek Queen 2d 30088.

Junior Sow Pig ($8, $6, $4, $2)—First, Van Meter & Englebretson on Oak Lodge Cinderella 400, 80280; second, Merle & Bennie Davidson on Deer Creek Rena B 10, 30193; third, W. H. Winn on Windale Lerona 30205; fourth, Earl Caris on Oak Lodge Violet 214, 30165.

Senior Champion Boar ($5)—B. F. Davidson on Deer Creek Romeo 34th 29611.

Junior Champion Boar ($5)—B. F. Davidson on Deer Creek Royal 34th 30177.

Grand Champion Boar, Any Age ($5)—B. F. Davidson on Deer Creek Romeo 34th 29611.

Senior Champion Sow ($5)—B. F. Davidson on Deer Creek Rosa 8th 29544.

Junior Champion Sow ($5)—B. F. Davidson on Deer Creek Elena 28th 30179.

Grand Champion Sow, Any Age ($5)—B. F. Davidson on Deer Creek Rosa 8th 29544.

Aged Herd, Owned by Exhibitor ($10, $7, $5)—First, B. F. Davidson; second, L. C. Hand & Son; third, Van Meter & Englebretson.

Aged Herd, Owned and Bred by Exhibitor ($10)—First, B. F. Davidson.

Young Herd, Owned by Exhibitor ($10, $7, $5, $3)—First, B. F. Davidson; second, W. H. Winn; third, Van Storm; fourth, L. C. Hand & Son.

Young Herd, Owned and Bred by Exhibitor ($10, $7, $5)—First, B. F. Davidson; second, W. H. Winn; third, Merle & Bennie Davidson.

Get of Sire ($10, $7, $6, $4)—First, B. F. Davidson; second, W. H. Winn; third, L. C. Hand & Son; fourth, L. C. Hand & Son.

Produce of Sow ($10, $7, $6, $4)—First, B. F. Davidson; second, W. H. Winn; third, L. C. Hand & Son; fourth, L. C. Hand & Son.

IOWA BOYS AND GIRLS' PIG CLUB.

EXHIBITORS—Albert Augustine, Rose Hill; Daniel W. Augustine, Rose Hill; Lawrence Aves, Melbourne; Loraine Baker, Bondurant; Chas. Baldwin, Gladbrook; Dale Barker, Keosauqua; Clyde Barnett, Redfield; Chas. Barr, Ames; Leland Beasley, Adel; Theodore Beatty, Valley Junction; Carroll Bennett, Dexter; Verle Bennett, Dexter; Delbert Berry, Atlantic; Ralph Berry, Atlantic; Bernice Bieber, Muscatine; Dwight Bock, Council Bluffs; Morgan Bonger, Marshalltown; Ardell Borschel, Iowa City; Mydrian Boyer, Farmington; Lester Brand, West Liberty; Perry Brazelton, Ankeny; Lester Brehmer, Atlantic; Ralph Brehmer, Atlantic; Aaron Brockelsby, Vail; Alton Brown, Iowa City; Harry Brownlee, Adair; Armond Bruce, Greenfield; Leo Bruns, Sigourney; Richard Buchanan, Adel; Wm. Buchanan, Adel; Jack Burkett, Minburn; Geo. Burnstedt, Des Moines; Oliver Burnstedt, Des Moines; Robt. Butler, Prairie City; Joseph Caputo, Marshalltown; Chas. Carey, West Branch; Earl Caris, Minburn; Orville Cashman, Orient; Frank Chambers, Stuart; Le Von Charles, Red Oak; Donald Clayton, Waukee; Verne Clayton, Waukee; Clifford Cochran, West Liberty; Raymond Comes, Atlantic; Ivan Compton, Dexter; Marion Conrad, Melbourne; Orval Crowe, Sigourney; Fay Cunningham, Grimes; Verr Cunningham, Grimes; Howard Dann, Waukee; Bertha Dannen, Melbourne; Mary Dannen, Melbourne; Merle and Bennie Davidson, Menlo; Robert Davis, Iowa City; Etta and Johnny Dawson, Washta; Leland Devine, Stanton; Clarence Dickerson, Dallas Center; Ronald Diggins, Melbourne; Richard Dorale, Charter Oak; John Dorfler, Jr., Charter Oak; Wendel T. Edson, Storm Lake; Linden Elkhorn, Adair; Roy Falk, Red Oak; Ruby Farwell, Mackburg; Calvin Fausch, Sheldahl; Esther Fausch, Sheldahl; Mary Fausch, Sheldahl; Richard Fausch, Sheldahl; Merrill Finchem, Waukee; Dale Foster, West Liberty; Dale Fox, Dallas Center; Lysle Fox, Dallas Center; Virgil Fox, Dallas Center; Elmer Frederickson, Menlo; Worlie Frost, Waukee; Harriett Goetzman, Boone; Eleanor Goulke, Atlantic; Willie Goulke, Atlantic; Graham Bros., Brooklyn; William Roland Griffith, Iowa City; May Hagen, Norwalk; Arnold Hagge, Bondurant; Andrew Hamline, Polk; Lucian Hammon, Woodward; Duane Hansell, Indianola; Clarence Hansen, Atlantic; Claire Hardin, Orient; Ray Hart, Bondurant; Lloyd Harvenagle, Atalissa; Frank Hawker, West Liberty; Fred Hawker, West Liberty; William Herbert, Atlantic; Mary Francis Herring, Des Moines; Charles Hibbs, Le Grand; Ralph Hibbs, Le Grand; Kenneth Hines, Orient; Paul Hoag, Muscatine; Arthur Horn, Greenfield; Leslie Hoskins, Cantril; Allen Hoy, Adel; Velma Hoy, Adel; Howard

Hunt, Redfield; Merrill Hunt, Redfield; Warren Hunter, Iowa City; Helen Hurlbut, Conrad; F. Burton Huston, Waukee; John Hyde, Elliott; John Ingels, Melbourne; Bede Irving, Stockport; Elmer James, Selma; Luin Jipsen, Atlantic; Paul Johnson, Orient; Ivan Jones, Red Oak; Harold Jump, Waukee; Lenene Jump, Waukee; Allan Keating, Clive; Charles Keating, Clive; John Keating, Clive; Leland Keen, Le Grand; Freddie Kemp, Greenfield; Edw. Kinsey, Grimes; John Kinsey, Grimes; Jessie J. Klein, Altoona; Arthur Knop, Charter Oak; Dora Knop, Charter Oak; John Knop, Atlantic; George Kolda, Solon; Clarence Kruse, West Liberty; Earnest Kuhns, Orient; William Lacina, Iowa City; Harold Launspach, Adelphi; Morris Legler, Letts; Albert Lengeman, Coon Rapids; Elmer Lengeman, Coon Rapids; Martin Linde, Denison; Leonard Lister, Marshalltown; Sam McAdoo, Runnells; Aloysius McKee, Creston; Myron McElivain, Dow City; Lawrence McGonish, West Liberty; Virgil McIntosh, Dunlap; Francis Mapes, Earlham; Everil Merkley, Sac City; Roscoe Marsden, Boone; Harvey Maxwell, Adair; Charles Meacham, Adelphi; Doral Miller, Muscatine; Adrian Minetor, Grimes; Salome Minetor, Altoona; Raymond Morrison, Dow City; Glen Mortimer, Minburn; Norwood Mountain, Valley Junction; Kenneth Mullins, Adel; Loren Mullins, Adel; Arthur H. S. Murphy, Ames; David S. Murphy, Ames; Edwin Nay, West Liberty; Paul Neuroth, Haverhill; Roy Neuroth, Haverhill; Raymond Nicholl, Gilman; Roy Nichol, Clemons; Stacy Nichol, Jr., Clemons; Edw. Niederhauser, Marshalltown; Ernest Nieman, Underwood; Fred Nieman, Underwood; Richard Olsen, Adel; Vernon R. Olson, Dunbar; Kathleen Overholt, Iowa City; Overholt Sisters, Iowa City; Fred B. Owen, Jr., Guthrie Center; Shubel Owen, Guthrie Center; Henry E. Patterson, Stuart; Omer Payne, Linden; Dean Rendarvis, Keosauqua; Ernest and Leslie Perry, Jr., St. Anthony; Leland Deles Perry, St. Anthony; Loyal Alvin Perry, St. Anthony; Gerald Person, Runnells; Winano Person, Adelphi; John L. Peters, Bouton; Eddie Peterson, Denison; Howard Poitevan, Dow City; Evan Poula, Swisher; Erma Lea Priest, Runnells; Marjory Priest, Runnells; Albert Pritchard, Bondurant; Merrill Radloff, Le Grand; Beatrice Randall, Sigourney; Gwendolyn Randall, Sigourney; Earl Ransom, Dow City; Lawrence Reis, Greenfield; Clarence Renand, Bondurant; J. Henry Rinker, Rippey; Harold Robinson, Rhodes; Marie Robinson, Rhodes; Willard Robinson, State Center; Marion Rosenbaugh, Orient; Lenine Roger, Adel; Renz Roger, Adel; Clarence Runft, Reinbeck; Aubrey Russell, Indianola; Doris Russell, Indianola; Emmet Ryan, Underwood; Carl Rylander, Le Grand; Marvin Sandstrom, Kiron; Will Sargent, Brooklyn; Hardyce Schneider, Underwood; Max Schneider, Underwood; Rolland Schneider, Underwood; John Schoborg, Haverhill; Harold Schomberg, Lone Tree; Edwin Sharon, Valley Junction; Robert Sharon, Valley Junction; Andrew Sharp, Dow City; Robert Sharp, Dow City; Herbert Sheehan, Greenfield; Marie Sipple, Kalona; George W. Smith, Dunlap; Lester Smith, Orient; Nellie J. Smith, Dunlap; Virgil Smith, Boone; Ralph Stark, Boxholm; Ivan Stimmell, Oxford; Harold Swallow, Valley Junction; Howard Swallow, Valley Junction; Grace Overholt, Iowa City; Frank W. Talbott, Selma; Clair Terrill, Redfield; Lurene Terrill, Redfield; Roy Thomas, Elliott; Mabel Thompson, Atlantic; Mildred Thompson, Atlantic; Opal Thompson, Atlantic; Verle Thompson, Minburn; Vernon Tomlinson, Bondurant; Henry Trexal, Denison; Walter Utterback, Sigourney; Clover Ven Benthuysen, Runnels; John Van Devender, Adel; Wilber Van Devender, Adel; Clark Van Meter, Adel; Donald Van Vleet, Orient; John K. Volk; Teddy Wallace, Dallas Center; Leonard Walsh, Adair; Lloyd Walters, West Liberty; Eddie Wambold, Greenfield; Donald Weiss, Dow City; Walter Weiss, Denison; Martin Wendres, West Liberty; Donald Wensel, Melbourne; Leland Wilcox, Adel; Howard Williams, Altoona; Arthur Windom, Nodaway; Glen Windom, Nodaway; Viola Yingst, State Center; Everett Zachary, Sheldahl; Agnes Zellmar, Atlantic; Clarence Zellmar, Atlantic; Harold Zellmar, Atlantic; Mildred Zellmar, Atlantic; Oscar Zellmar, Atlantic; Julius Zimmerman, West Liberty.

JUDGES.................................. E. F. FERRIN,
H. H. KILDEE,
J. D. WALTEMEYER.

CHESTER WHITES

Boars ($20, $18, $15, $12, $10, $9, $8, $7, $6, $5, $4, $4, $3)—First, Mydrian Boyer on Rusco 220921; second, Charles Barr; third, Ed. Niederhauser on Loag Sensation; fourth, Mydrian Boyer on Busco 220923; fifth, Wm. Herbert; sixth, Roscoe Marsden; seventh, Mildred Thompson; eighth, Clarence Runft; ninth, Raymond Morrison; tenth, Warren Hunter; eleventh, Wm. Herbert; twelfth, Raymond Morrison; thirteenth, Roscoe Marsden.

Sows ($20 $18, $15, $12, $10, $9, $8, $7, $6, $5, $4, $4, $3, $3, $3)—First, Lester Brand on Miss Chimes III; second, Charles Barr; third, Dale Foster; fourth, Ed. Niederhauser; fifth, Clifford Cochran; sixth, Wm. Rowland Griffith; seventh, Wm. Herbert; eighth, Clarence Runft; ninth, Roscoe Marsden; tenth, Mydrian Boyer; eleventh, John Kinsey on Industry's Pride; twelfth, Frank Chambers on Hawkeye Queen; thirteenth, Mildred Thompson; fourteenth, Raymond Morrison; fifteenth, Ed. Kinsey on White Belle.

Litter ($20, $18, $16, $14, $12, $10, $10, $10)—First, Charles Barr; second, Ed. Niederhauser; third, Mydrian Boyer; fourth, Clarence Runft; fifth, Wm. Rowland Griffith; sixth, Roscoe Marsden; seventh, Raymond Morrison; eighth, Warren Hunter.

HAMPSHIRES

Boars ($20, $16, $12, $10, $9, $8, $7, $6, $5, 5, $4, $4, $3, $3, $3)—First, Marie Robinson; second, Will Sargent on Todays Marvel 120021; third, Viola Yingst on My Long Fellow; fourth, Harold Robinson on Mandy's King; fifth, Leland Keen on Fashion King; sixth, Everil Merkley on The Shore Boy 120347; seventh, Merrill Radloff on Mady's Leader; eighth, F. Burton Huston on Pinecrest Tom; ninth, F. Burton Huston on Pinecrest Jim; tenth, Lawrece Aves on Wickware Leader; eleventh, Charles Meacham; twelfth, Ralph Brehmer; thirteenth, Delbert Berry; fourteenth, Will Sargent; fifteenth, Willie Grulke.

Sows ($20, $16, $12, $10, $9, $8, $7, $6, $5, $5, $4, $4, $3, $3, $3)—First, Julius Timmerman; second, Merrill Hunt on Merry Girl; third, Morgan Bouger on Perfection Pearl; fourth, Doral Miller; fifth, Merrill Radloff on "Pinks" fashion; sixth, Clarence Kruse; seventh, Frank Talbott on Hawkeye Beauty 305522; eighth, Carroll Bennett on Warrior Princess; ninth, Ralph Hibbs on Letitia II; tenth, Donald Weiss; eleventh, Charles Meacham; twelfth, Leland Keen on Florence Fashion; thirteenth, Viola Yingst on Miss Longfellow; fourteenth, Will Sargent on Cora Barton 304384; fifteenth, Leslie Hoskins on Queene.

Litter ($20, $16, $12, $10, $10, $9, $8, $7, $6, $5, $5, $3, $3, $3, $3)—First, Ralph Hibbs; second, Merrill Radloff; third, F. Burton Huston; fourth, Viola Yingst; fifth, Marie Robinson; sixth, Charles Meacham; seventh, Carl Rylander; eighth, Leland Keen; ninth, Lawrence Aves; tenth, Harold Robinson; eleventh, Willie Grulke; twelfth, Mary Frances Herring; thirteenth, Donald Weiss; fourteenth, Will Sargent; fifteenth, Everil Merkley.

DUROC JERSEYS

Boars ($18, $15, $12, $10, $9, $8, $7, $6, $5, $4, $4, $3, $3, $2)—First, Albert Lengemann on King Orion Sensation 219205; second. John Schoberg on Pilots Choice II 455689; third, Aloysius McKee on Rivals Leader; fourth, Aloysius McKee on Rivals Masterpiece; fifth, John Schoborg on Pilots Choice 455687; sixth, Donald Wensel on Giant Sensation Jr. 454727; seventh, Roy Nichol on The Pilot; eighth, Elmer Lengeman on Yankee Orion Sensation 453943; ninth, Leland D. Perry on Chief II 455835; tenth, Clarence Hansen; eleventh, Lloyd Alvin Perry on Mahaska Overall 455825; twelfth, Ernest L. Perry Jr. on Chester 456851; thirteenth, Mable Thompson; fourteenth, Donald Wensel on Giant Sensation 454729; fifteenth, Shubel Owen.

Sows ($18, $15, $12, $10, $9, $8, $7, $6, $5, $5, $4, $4, $3, $3, $2)—First, Clyde Barnett; second, Ray Neuroth on Pilots Lady IV; third, Lloyd Alvin Perry on Susie 1224630; fourth, John Schoborg on Pilot's Queen 1224102; fifth, Leonard Lester on Pilot's Rose; sixth, Paul Neuroth on Pilot's Lady

1224094; seventh, Donald Wensel on Don's Sensation III 1221942; eighth, Ernest L. Perry Jr. on Lady 1227070; ninth, Leland D. Perry on Surprise Girl 1224634; tenth, Aloysius McKee on Rivals Col. Lady; eleventh, Aloysius McKee on Miss Pathe Maid; twelfth, Harold Swallow on Sensation Maid; thirteenth, Harold Zellmar; fourteenth, Mabel Thompson; fifteenth, Clarence Hansen.

Litter ($18, $15, $12, $10, $9, $8, $7, $6, $5, $5, $5, $3)—First, Paul Neuroth; second, Donald Wentzell; third, John Schoborg; fourth, Aloysius McKee; fifth, Lloyd Alvin Perry; sixth, Leonard Lester; seventh, Elmer Lengeman; eighth, Leland D. Perry; ninth, Harold Zellmar; tenth, Ernest L. Perry Jr.; eleventh, Opal Thompson; twelfth, Dora Knop.

POLAND CHINAS

Boars ($18, $15, $12, $10, $9, $8, $7, $6, $5, $5, $4, $4, $3, $3, $2)—First, Joseph Caputo on Orange Giant; second, Roy Thomas; third, Marvin Conrad; fourth, Joseph Caputo on Pathfinder I; fifth, Jesse J. Klein on Royal Tim; sixth, Willard Robinson on Nick's Bigbone; seventh, Mary Danner on Gotch Jr.; eighth, Oliver Burnstedt; ninth, Willard Robinson on Nick's Bigbone I; tenth, William Lacina on Rainbow Giant; eleventh, Bertha Danner on Gotch Leader; twelfth, Ronald Diggins on Pathfinders Equal; thirteenth, Ronald Diggins on Pathfinder Again; fourteenth, John Knop; fifteenth, George Burnstedt.

Sows ($18, $15, $12, $10, $9, $8, $7, $6, $5, $5, $4, $4, $3, $3, $2)—First, Willard Robinson on Miss Bigbone; second, Marvin Conrad; third, Oliver Burnstedt; fourth, Joseph Caputo on Pathfinder's Giantess; fifth, Jesse J. Klein on Queen; sixth, Ronald Diggins on Pathfinder's Queen; seventh, Marjory Priest on Lady Monastill; eighth, Salome Minetor; ninth, Leland Devine; tenth, Lawrence McGornish; eleventh, Morris Legler; twelfth, Mary Danner on Miss Gotch; thirteenth, William Lacina on Rainbow Lady I; fourteenth, Harry Trexal on Premier Girl; fifteenth, Martin Wendres.

Litter ($18, $15, $12, $10, $9, $8, $7, $6, $5, $5, $5, $3)—First, Marvin Conrad; second, Willard Robinson; third, Joseph Caputo; fourth, Roy Thomas; fifth, Mary Danner; sixth, Bertha Danner; seventh, Salome Minetor; eighth, Ronald Diggins; ninth, Harry Trexal; tenth, Leland Devine; eleventh, William Lacina; twelfth, George Burnstedt.

YORKSHIRES

Boars ($20, $17, $14, $12, $10, $9, $8)—First, Loren Mullins on Hillcrest Prince; second, Clark Van Meter on Meadow Prince I 30222; third, Loren Mullins on Hillcrest Prince II; fourth, Mildred Zellmar; fifth, Kenneth Mullins on Hillcrest Prince III; sixth, Merle and Bennie Davidson on Deer Creek M & B 5 30196; seventh, Kenneth Mullins on Hillcrest Prince IV..

Sows ($20, $17, $14, $12, $10, $9, $8, $7, $6)—First, Renz Royer on Oak Lodge Princess 515 30162; second, Leland Wilcox on Oak Lodge Violet 213th 30164; third, Earl Caris on Oak Lodge Violet 214th 30165; fourth, Lennie Royer on Oak Lodge Violet 219th 30168; fifth, Merle & Bennie Davidson on Windale Lolo 30201; sixth, Clark Van Meter on Meadow Princess I 30214; seventh, Leland Beasley on Oak Lodge Queen Bess; eighth, Kenneth Mullins on Hillcrest Prince III; ninth, Lorin Mullins on Hillcrest Princess.

Litter ($18, $15, $12, $9)—First, Lorin Mullins; second, Clark Ven Meter; third, Kenneth Mullins; fourth, Merle & Bennie Davidson.

SPOTTED POLAND CHINA

Boars ($15, $12, $10, $8, $7, $6, $6, $5, $5)—First, Ralph Berry; second, Duane Hansell on Hansells Pride; third, John Van Devender on Van Hope Laddie 33; fourth, John Van Devender on Van Hope Laddie 31; fifth, Vernon R. Olson on Arch Back Leader; sixth, Wilbur Van Devender on Van Hope Laddie 34th; seventh, Robert Butler on Silver Tim; eighth, Duane Hansell; ninth, Vernon R. Olson on Smooth Bob.

Sows ($15, $12, $10, $8, $7, $6, $6, $5, $5)—First, Robert Butler on Blue Eyed Girl; second, John Van Devender on Van Hope Lassie 32d; third, Duane Hansell on H's Miss Wonder; fourth, Wilbur Van Devender on Van Hope Laddie 35th; fifth, Mae Hagen on M. English Lady; sixth, Ralph Berry; seventh, Ivan Compton on Tootsie; eighth, John H. Volk on English Lassie; ninth, Vernon R. Olson on Archback Pride.

Litter ($12, $10, $8, $7, $6, $5, $4)—First, Robert Butler; second, John Van Devender; third, Ralph Berry; fourth, Duane Hansell; fifth, Wilbur Van Devender; sixth, Vernon R. Olson; seventh, Martin Linde.

TAMWORTH

Boars ($15, $12, $10, $8, $7, $6, $5, $4, $2)—First, Kathleen Overholt on Seven Oaks Mac I 27563; second, David S. Murphy on Violet King II; third, Grace Overholt on Seven Oaks Mac II 27562; fourth, Charles Barr on Maple Grove Chief; fifth, Charles Barr on Maple Grove Lee; sixth, David S. Murphy on Violet King I; seventh, Marie Sipple on Bonnie Boy II 27479; eighth, Arthur H. S. Murphy on Bearboy 27459; ninth, Arthur H. S. Murphy on Creekboy 27460.

Sows ($15, $12, $10, $8, $7, $6, $5, $4, $2, $1)—First, Kathleen Overholt on Seven Oaks Viema II 27564; second, Clair Terrill on Rose Hill Ruby III 27321; third, Charles Barr on Maple Grove Rose; fourth, Lurene Terrill on Rose Hill Lady; fifth, Grace Overholt on Seven Oaks Viema I 27565; sixth, David S. Murphy on Ames Violet I; seventh, Marie Sipple on Bonnie Rose 27483; eighth, Arthur H. S. Murphy on Systemary 27457; ninth, Daniel Augustine on Rose Hill Rena III 26991; tenth, Albert Augustine on Rose Hill Rose I 26989.

Litter ($20, $15, $10, $8)—First, Charles Barr; second, David S. Murphy; third, Marie Sipple; fourth, Arthur H. S. Murphy.

BERKSHIRES

Boars ($12, $10)—First, Clarence Dickerson on Dickerson's Model I; second, Clarence Dickerson on Dickerson's Model II.

Sows ($12)—First, Clarence Dickerson on Dickerson's Model Girl I.

Litter ($12)—First, Clarence Dickerson.

COUNTY EXHIBIT

Ten or more pigs must be shown. 60 per cent on winnings and individuality, and forty per cet on number ($50, $40, $30, $25, $20, $18, $15, $12, $10, $10)—First, Marshall County Pig Club; second, Marshall County Pig Club; third, Marshall County Pig Club; fourth, Grundy County Pig Club; fifth, Montgomery County Pig Club; sixth, Guthrie County Pig Club; seventh, Dallas County Pig Club; eighth, Polk County Pig Club; ninth, Crawford County Pig Club; tenth, Boone County Pig Club.

FAT HOG SECTION

Fat Breeds, Grade or Cross Breds, All Fed for Market Purposes. Each contestant may show three pigs, farrowed on or after February 15, 1922, ($20, $18, $15, $12, $10, $10, $10, $5, $5, $5, $5, $5)—First, Harold Zellmar; second, John Ingles; third, John Ingles; fourth, John Ingles; fifth, Mildred Zellmar; sixth, Dale Fox; seventh, Allen Hoy; eighth, Walter Utterback; ninth, Glen Windom; tenth, Dale Fox; eleventh, Oscar Zellmar; twelfth, Allen Hoy.

SPECIAL PRIZES

Offered by the National Duroc Jersey Record Association.

Boy or Girl Winning Over All Breeds in the Market Pig Club Class with a Duroc Jersey Pig (Engraved Gold Watch)—First, Harold Zellmar.

SHEEP DEPARTMENT

SUPERINTENDENT........................E. T. DAVIS, Iowa City, Iowa.

EXHIBITORS—Matt Baker, Mitchellville; E. H. Bennett, Hardy; E. L. Bitterman, Nora Springs; A. J. Blakely & Son, Grinnell; C. S. Bratt & Son, Arapahoe, Neb.; D. W. Bruus, Sigourney; W. A. Buck, Humeston; Delbert B. Craven, Knoxville; C. C. Croxen, West Liberty; Leonard Daniel & Sons, Corning; Eddingfield Stock Farm, Mt. Pleasant; Joe W. Edgar, New London; Ellis Bros., Molino, Mo.; J. T. Enness & Son, Gilbert; Elmer Frye & Son, Corydon; John Graham & Son, Eldora; J. G. Hanmer, Ames; Edmund Hanson, Dean; Hanson & Warner, Dean; B. F. Harris Farms, Seymour, Ill.; Geo. Hauser & Son, Union; Heatherall Farms, Kellerton; Iowa State College, Ames; L. F. Jones, Winterset; J. D. Moore & Sons, Mt. Pleasant; F. H. Olsen & Son, Anita; J. T. Ratliff & Son, Kirksville, Mo.; Gale Reed, Ames; Sherwood Bros., Shelbyville, Mo.; E. P. Smith, Ely; P. M. Sutton, Cambria; C. A. Taylor, Ames; E. G. Uhl, Station A, Ames; Warner, Hill & Arnold, Bloomfield; R. C. Yoke, Allerton.

IOWA SWEEPSTAKES SILVER LOVING CUPS

Best Ram, All Mutton Breeds—R. C. Yohe on Aged Shropshire Ram.

Best Ewe, All Mutton Breeds—John Graham & Son on Aged Oxford Ewe.

MERINO CLASS "B"

JUDGE............................JOHN E. WEBB, Indianapolis, Ind.

Ram Two Years Old or Over ($10, $7, $4)—First, Heatherhall Farms; second, Warner, Hill & Arnold; third, Warner, Hill & Arnold.

Ram One Year Old and Under Two ($10, $7, $4)—First, Ellis Bros.; second, Heatherhall Farms; third, Ellis Bros.

Ram Under One Year ($10, $7, $4)—First, A. J. Blakely & Son; second, Heatherhall Farms; third, Ellis Bros.

Ewe Two Years Old or Over ($10, $7, $4)—First, A. J. Blakely & Son; second, Warner, Hill & Arnold; third, Heatherhall Farms.

Ewe One Year Old and Under Two ($10, $7, $4)—First, Heatherhall Farms; second, Warner, Hill & Arnold; third, Warner, Hill & Arnold.

Ewe Under One Year ($10, $7, $4)—First, A. J. Blakely & Son; second, Ellis Bros.; third, A. J. Blakely & Son.

Ram, Any Age ($10)—First, Ellis Bros. on Yearling.

Ewe, Any Age ($10)—First, A. J. Blakely & Son on Aged Ewe.

Flock ($10, $8)—First, Heatherhall Farms; second, A. J. Blakely & Son.

Get of Sire ($10, $8, $6)—First, A. J. Blakely & Son; second, Ellis Bros.; third, Warner, Hill & Arnold.

IOWA SPECIALS
MERINO CLASS "B"

Ram Under One Year ($6, $4)—First, A. J. Blakely & Son; second, A. J. Blakely & Son.

Ewe Two Years Old or Over ($6, $4)—First, A. J. Blakely & Son; second, Joe W. Edgar.

Ewe One Year Old and Under Two ($6, $4, $2)—First, A. J. Blakely & Son; second, A. J. Blakely & Son; third, Joe W. Edgar.

Ewe Under One Year ($6, $4, $2)—First, A. J. Blakely & Son; second, A. J. Blakely & Son; third, J. W. Edgar.

Ram, Any Age ($5)—First, A. J. Blakely & Son.

Ewe, Any Age ($5)—First, A. J. Blakely & Son.

Flock ($10)—First, A. J. Blakely & Son.

Get of Sire ($10)—First, A. J. Blakely & Son.

MERINO CLASS "C"

Ram Two Years Old or Over ($10, $7, $4)—First, Heatherhall Farms; second, Warner, Hill & Arnold; third, Warner, Hill & Arnold.

Ram One Year Old and Under Two ($10, $7, $4)—First, Warner, Hill & Arnold; second, Warner, Hill & Arnold; third, Heatherhall Farms.

Ram Under One Year ($10, $7, $4)—First, A. J. Blakely & Son; second, Heatherhall Farms; third, A. J. Blakely & Son.

Ewe Two Years Old or Over ($10, $7, $4)—First, Heatherhall Farms; second, A. J. Blakely & Son; third, Warner, Hill & Arnold.

Ewe One Year Old and Under Two ($10, $7, $4)—First Warner, Hill & Arnold; second, Warner, Hill & Arnold; third, A. J. Blakely & Son.

Ewe Under One Year ($10, $7, $4)—First, Heatherhall Farms; second, Joe W. Edgar; third, A. J. Blakely & Son.

Ram, Any Age ($10)—First, Heatherhall Farms.

Ewe, Any Age ($10)—First, Heatherhall Farms.

Flock ($10, $8, $6)—First, Heatherhall Farms; second, Warner, Hill & Arnold; third, A. J. Blakely & Son.

Get of Sire ($10, $8, $6)—First, A. J. Blakely & Son; second, Joe W. Edgar; third, Warner, Hill & Arnold.

IOWA SPECIALS

MERINO CLASS "C"

Ram Two Years Old or Over ($6)—First, Joe W. Edgar.

Ram One Year Old and Under Two ($6, $4)—First, A. J. Blakely & Son; second, Joe W. Edgar.

Ram Under One Year ($6, $4)—First, A. J. Blakely & Son; second, Joe W. Edgar.

Ewe Two Years Old or Over ($6, $4)—First, A. J. Blakely & Son; second, A. J. Blakely & Son.

Ewe One Year Old and Under Two ($6, $4, $2)—First, A. J. Blakely & Son; second, Joe W. Edgar; third, A. J. Blakely & Son.

Ewe Under One Year ($6, $4, $2)—First, Joe W. Edgar; second, A. J. Blakely & Son; third, A. J. Blakely & Son.

Ram, Any Age ($5)—First, A. J. Blakely & Son.

Ewe, Any Age ($5)—First, A. J. Blakely & Son.

Flock ($10, $8)—First, A. J. Blakely & Son; second, Joe W. Edgar.

Get of Sire ($10)—First, Joe W. Edgar.

RAMBOUILLET

Ram Two Years Old or Over ($10, $7, $4)—First, Ellis Bros.; second, C. C. Croxen; third, Ellis Bros.

Ram One Year Old and Under Two ($10, $7, $4)—First, Ellis Bros.; second, Iowa State College; third, Ellis Bros.

Ram Under One Year ($10, $7, $4)—First, Ellis Bros.; second, Ellis Bros.; third, Iowa State College.

Ewe Two Years Old or Over ($10, $7, $4)—First, Ellis Bros.; second, Iowa State College; third, Iowa State College.

Ewe One Year Old and Under Two ($10, $7, $4)—First, Ellis Bros.; second, Iowa State College; third, Ellis Bros.

Ewe Under One Year ($10, $7, $4)—First, Iowa State College; second, Iowa State College; third, Ellis Bros.

Ram, Any Age ($10)—First, Ellis Bros. on Aged Ram.

Ewe, Any Age ($10)—First, Ellis Bros. on Aged Ewe.

Flock ($10, $8, $6)—First, Ellis Bros.; second, Iowa State College; third, C. C. Croxen.

Get of Sire ($10, $8, $6)—First, Iowa State College; second, Ellis Bros.; third, C. S. Bratt & Son.

COTSWOLD

JUDGE................................W. C. COFFEY, St. Paul, Minn.

Ram Two Years Old or Over ($7, $5, $4, $3, $2)—First, Joe W. Edgar; second, Elmer Frye & Sons on E. Frye & Sons 40; third, Elmer Frye & Sons on E. Frye & Sons 23; fourth, C. A. Taylor on Shows 119200; fifth, E. P. Smith on Husted's 101674.

Ram One Year Old and Under Two ($7, $5, $4, $3, $2)—First, Joe W. Edgar; second, Heatherhall Farms; third, Elmer Frye & Sons on E. Frye & Sons 67; fourth, Maple Grove Farm; fifth, Joe W. Edgar.

Ram Under One Year ($7, $5, $4, $3, $2)—First, Joe W. Edgar; second, E. P. Smith; third, E. P. Smith; fourth, Joe W. Edgar; fifth, Elmer Frye & Sons on E. Frye & Sons 90.

Ewe Two Years Old or Over ($7, $5, $4, $3, $2)—First, Joe W. Edgar; second, C. A. Taylor on Binlms 10800; third, Joe W. Edgar; fourth, Heatherhall Farm; fifth, Elmer Frye & Sons on E. Frye & Sons 16 93654.

Ewe One Year and Under Two ($7, $5, $4, $3, $2)—First, C. A. Taylor; second, Heatherhall Farm; third, Joe W. Edgar; fourth, C. A. Taylor; fifth, Joe W. Edgar.

Ewe Under One Year ($7, $5, $4, $3, $2)—First, E. P. Smith; second, Joe W. Edgar; third, Heatherhall Farm; fourth, Joe W. Edgar; fifth, Elmer Frye & Sons on E. Frye & Sons 83.

Ram, Any Age ($10)—First, Joe W. Edgar on aged ram.

Ewe, Any Age ($10)—First, Joe W. Edgar on Aged Ewe.

Flock ($9, $7, $5, $3)—First, Joe W. Edgar; second, C. A. Taylor; third, Heatherhall Farm; fourth, Elmer Frye & Sons.

Get of Sire ($9, $7, $5, $3)—First, Joe W. Edgar; second, Elmer Frye & Sons; third, E. P. Smith; fourth, C. A. Taylor.

IOWA SPECIALS

COTSWOLD

Ram Two Years Old or Over ($6, $4, $2)—First, Elmer Frye & Sons on E. Frye & Sons 40; second, Elmer Frye & Sons on E. Frye & Sons 23; third, Joe W. Edgar.

Ram One Year Old and Under Two ($6, $4, $2)—First, Elmer Frye & Sons on E. Frye & Sons 67; second, Maple Grove Farm; third, Joe W. Edgar.

Ram Under One Year ($6, $4, $2)—First, E. P. Smith; second, E. P. Smith; third, Joe W. Edgar.

Ewe Two Years Old or Over ($6, $4, $2)—First, Joe W. Edgar; second, Elmer Frye & Sons on E. Frye & Sons 93654; third, Maple Grove Farms.

Ewe One Year Old and Under Two ($6, $4, $2)—First, Joe W. Edgar; second, Joe W. Edgar; third, Elmer Frye & Sons on E. Frye & Sons 103787.

Ewe Under One Year ($6, $4, $2)—First, Joe W. Edgar; second, Joe W. Edgar; third, Elmer Frye & Sons.

Ram, Any Age ($5)—First, Elmer Frye & Sons on Aged Ram.

Ewe, Any Age ($5)—First, Joe W. Edgar on Aged Ewe.

Flock ($10, $8, $6)—First, Joe W. Edgar; second, Elmer Frye & Sons; third, Maple Grove Farm.

Get of Sire ($10, $8)—First, Elmer Frye & Sons; second, E. P. Smith.

SPECIAL PRIZES

COTSWOLD

For Pen of Lambs, Either Sex, Get of One Sire Bred and Owned by Exhibitor. Offered by the American Cotswold Registry Association, ($10, $5) —First, Joe W. Edgar; second, Elmer Frye & Sons.

LINCOLN AND LEICESTER

JUDGE..............................W. C. COFFEY, St. Paul, Minn.

Ram Two Years Old or Over ($7, $5)—First, Heatherhall Farms; second, C. A. Taylor.

Ram One Year Old and Under Two ($7, $5)—First, C. A. Taylor; second, Heatherhall Farms.

Ram Under One Year ($7, $5, $4)—First, Heatherhall Farms; second, C. A. Taylor; third, C. A. Taylor.

Ewe Two Years Old or Over ($7, $5, $4)—First, Heatherhall Farms; second, C. A. Taylor; third, Heatherhall Farms.

Ewe One Year Old and Under ($7, $5, $4)—First, Heatherhall Farms; second, C. A. Taylor; third, C. A. Taylor.

Ewe Under One Year ($7, $5, $4)—First, Heatherhall Farms; second, C. A. Taylor; third, C. A. Taylor.

Ram, Any Age ($5)—First, Heatherhall Farms on Aged Ram.

Ewe, Any Age ($5)—First, Heatherhall Farms on Yearling Ewe.

Flock ($8, $6)—First, Heatherhall Farms; second, C. A. Taylor.

Get of Sire ($8)—First, C. A. Taylor.

HAMPSHIRE DOWNS

JUDGE..............................W. C. COFFEY, St. Paul, Minn.

Ram Two Years Old or Over ($12, $8, $6, $5, $3)—First, B. F. Harris Farms on U of I 782 35695; second, Heatherhall Farms; third, Iowa State College; fourth, B. F. Harris Farms on Harris 3 35338; fifth, E. L. Bitterman.

Ram One Year Old and Under Two ($12, $8, $6, $5, $3)—First, E. L. Bitterman; second, B. F. Harris Farms on Harris 53 38820; third, B. F. Harris Farms on Harris 32 B 38817; fourth, Maple Grove Farm; fifth, John Graham & Son.

Ram Under One Year ($12, $8, $6, $5, $3)—First, B. F. Harris Farms on Harris 119 41860; second, E. L. Bitterman; third, E. G. Uhl; fourth, B. F. Harris Farms on Harris III 41852; fifth, John Graham & Son.

Ewe Two Years Old or Over ($12, $8, $6, $5, $3)—First, Iowa State College; second, Heatherhall Farms; third, John Graham & Son; fourth, B. F. Harris Farms on Blastock 211 76729; fifth, Heatherhall Farms.

Ewe One Year Old and Under Two ($12, $8, $6, $5, $3)—First, Heatherhall Farms; second, B. F. Harris Farms on Harris 74 83061; third, John Graham & Sons; fourth, E. G. Uhl; fifth, John Graham & Sons.

Ewe Under One Year ($12, $8, $6, $5, $3)—First, B. F. Harris Farms on Harris 103 90460; second, B. F. Harris Farms on Harris 100 90457; third, John Graham & Son; fourth, E. L. Bitterman; fifth, John Graham & Sons.

Ram, Any Age ($10)—First, B. F. Harris Farms on Aged Ram.

Ewe, Any Age ($10)—First, Heatherhall Farms on Yearling.

Flock ($12, $8, $6, $5, $3)—First, B. F. Harris Farms; second, Heatherhall Farms; third, Iowa State College; fourth, E. L. Bitterman; fifth, John Graham & Son.

Get of Sire ($12, $8, $6, $5, $3)—First, B. F. Harris Farms; second, E. L. Bitterman; third, E. G. Uhl; fourth, John Graham & Son; fifth, F. H. Osen & Sons.

IOWA SPECIALS

HAMPSHIRE DOWNS

Ram Two Years Old or Over ($6, $4, $2)—First, E. L. Bitterman; second, John Graham & Son; third, E. L. Bitterman.

Ram One Year Old and Under Two ($6, $4, $2)—First, E. L. Bitterman; second, John Graham & Sons; third, C. C. Croxen.

Ram Under One Year ($6, $4, $2)—First, E. L. Bitterman; second, E. G. Uhl; third, John Graham & Son.

Ewe Two Years Old or Over ($6, $4, $2)—First, John Graham & Son; second, John Graham & Son; third, E. L. Bitterman.

Ewe One Year Old and Under Two ($6, $4, $2)—First, John Graham & Son; second, E. G. Uhl; third, John Graham & Son.

Ewe Under One Year ($6, $4, $2)—First, John Graham & Son; second, E. L. Bitterman; third, John Graham & Son.

Ram, Any Age ($5)—First, E. L. Bitterman on Yearling Ram.

Ewe, Any Age ($5)—First, John Graham & Sons on Aged Ewe.

Flock ($10, $8, $6)—First, E. L. Bitterman; second, John Graham & Son; third, F. H. Osen & Son.

Get of Sire ($10, $8, $6)—First, E. L. Bitterman; second, E. G. Uhl; third, John Graham & Son.

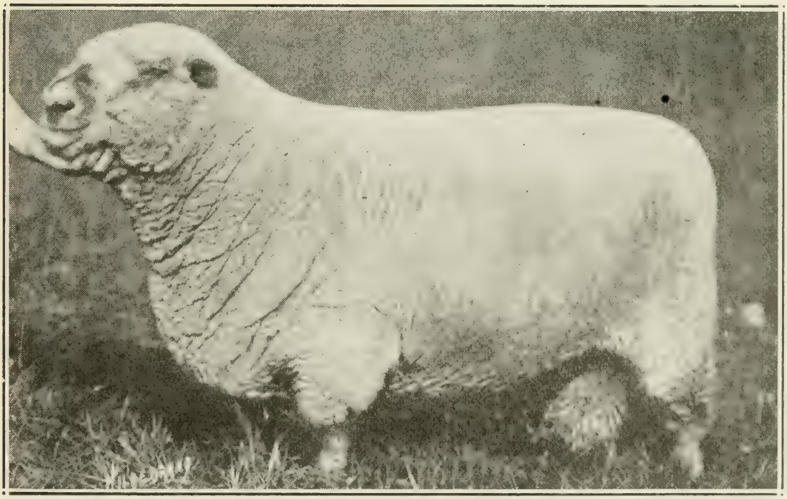
SHROPSHIRE

JUDGE..............................W. C. COFFEY, St. Paul, Minn.

Ram Two Years Old or Over ($12, $10, $8, $6, $4)—First, R. C. Yohe; second, Dan'l Leonard & Sons; third, Dan'l Leonard & Sons; fourth, Delbert B. Craven on E. Nock 70 509380; fifth, E. L. Bitterman.

Ram One Year Old and Under Two ($12, $10, $8, $6, $4)—First, Iowa State College; second, Dan'l Leonard & Sons; third, D. W. Bruns; fourth, R. C. Yohe; fifth, D. W. Bruns.

Ram Under One Year ($12, $10, $8, $6, $4)—First, J. G. Hanmer; second, J. G. Hanmer; third, R. C. Yohe; fourth, Iowa State College; fifth, Heatherhall Farms.



Champion Shropshire Ram. R. C. Yohe, Allerton, Iowa.

Ewe Two Years Old or Over ($12, $10, $8, $6, $4)—First, Heatherhall Farms; second, P. M. Sutton on P. M. Sutton 43 549301; third, D. W. Bruns; fourth, J. D. Moore & Son; fifth, P. M. Sutton on P. M. Sutton 41 549299.

Ewe One Year Old and Under Two ($12, $10, $8, $6, $4)—First, Heatherhall Farms; second, D. W. Bruns; third, J. D. Moore & Son; fourth, R. C. Yohe; fifth, R. C. Yohe.

Ewe Under One Year ($12, $10, $8, $6, $4)—First, E. L. Bitterman; second, Iowa State College; third, R. C. Yohe; fourth, Heatherhall Farms; fifth, L. F. Jones.

Ram, Any Age ($10)—First, R. C. Yohe on aged ram 527492.

Ewe, Any Age ($10)—First, Heatherhall Farms.

Flock ($12, $10, $8, $6)—First, R. C. Yohe; second, Iowa State College; third, D. W. Burns; fourth, E. L. Bitterman.

Get of Sire ($12, $10, $8, $6)—First, J. G. Hanmer; second, L. F. Jones; third, E. L. Bitterman; fourth, Iowa State College.

IOWA SHROPSHIRE SPECIALS

Ram Two Years Old or Over ($12, $8, $6, $5, $3)—First, Dan'l Leonard & Sons on 498813; second, Dan'l Leonard & Sons on 549293; third, E. L. Bitterman on 527521; fourth, R. C. Yohe on 527490; fifth, R. C. Yohe on 527492.

Ram One Year Old and Under Two ($12, $8, $6, $5, $3)—First, Dan'l Leonard & Son; second, R. C. Yohe on 550265; third, D. W. Bruns on 549450; fourth, E. L. Bitterman on 566375; fifth, J. D. Moore & Son on 565812.

Ram Under One Year ($12, $8, $6, $5, $3)—First, R. C. Yohe on 566744; second, D. W. Bruns on 567015; third, E. L. Bitterman on 566374; fourth, L. F. Jones on 566853; fifth, W. A. Buck on 586369.

Ewe Two Years Old or Over ($12, $8, $6, $5, $3)—First, P. M. Sutton on 549301; second, J. D. Moore & Son on 549184; third, P. M. Sutton on 549299; fourth, J. D. Moore & Son on 549198; fifth, Delbert B. Craven on Hillcroft Selection 553904.

Ewe One Year Old and Under Two ($12, $8, $6, $5, $3)—First, J. D. Moore & Son on 565818; second, R. C. Yohe on 566741; third, R. C. Yohe on 566742; fourth, E. L. Bitterman on 566378; fifth, E. L. Bitterman on 566381.

Ewe Under One Year ($12, $8, $6, $5, $3)—First, R. C. Yohe on 566737; second, Heatherhall Farms on 564594; third, L. F. Jones on 566859; fourth, L. F. Jones on 566864; fifth, D. W. Bruns on 566434.

Ram, Any Age ($10)—First, Dan'l Leonard on yearling ram.

Ewe, Any Age ($10)—First, P. M. Sutton on aged ewe 549301.

Flock ($12, $8, $6, $5, $3)—First, E. L. Bitterman; second, J. D. Moore & Son; third, D. W. Bruns; fourth, Delbert B. Craven; fifth, P. M. Sutton.

Get of Sire ($12, $8, $6, $5, $3)—First, L. F. Jones; second, E. L. Bitterman; third, Heatherhall Farms; fourth, D. W. Bruns; fifth, R. C. Yohe.

SPECIAL PREMIUMS OFFERED BY AMERICAN SHROPSHIRE REGISTRY ASSOCIATION

Ram Two Years Old or Over ($8, $6, $4, $3, $2)—First, R. C. Yohe on 527492; second, Dan'l Leonard on 498813; third, Dan'l Leonard on 549293; fourth, E. L. Bitterman on 527521; fifth, R. C. Yohe on 527490.

Ram One Year Old and Under Two ($8, $6, $4, $3, $2)—First Dan'l Leonard; second, R. C. Yohe on 550264; third, D. W. Bruns on 549450; fourth, E. L. Bitterman on 566377; fifth, J. D. Moore & Son on 565812.

Ram Lamb ($8, $6, $4, $3, $2)—First, J. G. Hanmer on 565468; second, J. G. Hanmer on 565467; third, R. C. Yohe on 566744; fourth, D. W. Bruns on 567015; fifth, E. L. Bitterman on 566374.

Ewe One Year Old and Under Two ($8, $6, $4, $3, $2)—First, J. D. Moore & Son on 565818; second, R. C. Yohe on 566741; third, R. C. Yohe on 566742; fourth, E. L. Bitterman on 566381; fifth, E. L. Bitterman on 566378.

Ewe Lamb ($8, $6, $4, $3, $2)—First, E. L. Bitterman on 566384; second, R. C. Yohe on 566737; third, Heatherhall Farms on 564912; fourth, L. F. Jones on 566859; fifth, L. F. Jones on 566864.

Ram, Any Age ($7.50)—First, R. C. Yohe on 527492.

Ewe, Any Age ($7.50)—First, J. D. Moore & Son on 565818.

Pen Four Lambs ($8, $6, $3, $2)—First, L. F. Jones; second, E. L. Bitterman; third, Heatherhall Farms; fourth, D. W. Bruns.

Pen, Three Yearling Ewes ($8, $6, $3, $2, $1)—First, R. C. Yohe; second, E. L. Bitterman; third, J. D. Moore & Son; fourth, L. F. Jones; fifth, Matt Baker.

Pen, Three Yearling Rams ($8, $6, $3, $2, $1)—First, E. L. Bitterman; second, J. D. Moore & Son; third, D. W. Bruns; fourth, R. C. Yohe; fifth, Matt Baker.

Best Show of His Own Breeding to the Exhibitor Never Having Exhibited at the Iowa State Fair ($10)—First, L. F. Jones.

OXFORD DOWNS

Ram Two Years Old or Over ($12, $8, $6, $5, $3)—First, Heatherhall Farms; second, John Graham & Son; third, Iowa State College 99196; fourth, John Graham & Son on Bruce 13 97936; fifth, Geo. Hauser & Son on 103653.

Ram One Year Old and Under Two ($12, $8, $6, $5, $3)—First, Iowa State College on 102661; second, Heatherhall Farms on 17993; third, C. A. Taylor; fourth, Gale Reed; fifth, Iowa State College on 104422.

Ram Under One Year ($12, $8, $6, $5, $3)—First, Iowa State College; second, Iowa State College; third, C. A. Taylor; fourth, C. A. Taylor; fifth, John Graham & Son.

Ewe Two Years Old or Over ($12, $8, $6, $5, $3)—First, John Graham & Son on 101991; second, Geo. Hauser & Son on 103657; third, Iowa State College on 101139; fourth, Iowa State College on 92182; fifth, Heatherhall Farms.

Ewe One Year Old and Under Two ($12, $8, $6, $5, $3)—First, Iowa State College on 102648; second, John Graham & Son on 101992; third, Geo. Hauser & Sons on 103662; fourth, Geo. Hauser & Sons on 103668; fifth, John Graham & Son on 101993.

Ewe Under One Year ($12, $8, $6, $5, $3)—First, John Graham & Son; second, Heatherhall Farms; third, Gale Reed; fourth, E. G. Uhl; fifth, Iowa State College.

Ram, Any Age ($10)—First, Heatherhall Farms on aged ram.

Ewe, Any Age ($10)—First, John Graham & Son on aged ewe.

Flock ($12, $8, $6, $5, $3)—First, John Graham & Son; second, Iowa State College; third, Heatherhall Farms; fourth, Geo. Hauser & Son; fifth, Gale Reed.

Get of Sire ($12, $8, $6, $5, $3)—First, John Graham & Son; second, Iowa State College; third, C. A. Taylor; fourth, Gale Reed; fifth, F. H. Osen & Sons.

IOWA OXFORD SPECIALS

Ram Two Years Old or Over ($7, $5, $4, $3, $2)—First, John Graham & Son on 97936; second, Geo. Hauser & Son; third, Geo. Hauser & Son; fourth, C. C. Croxen; fifth, John Graham & Son.

Ram One Year Old and Under Two ($7, $5, $4, $3, $2)—First, John Graham & Son on 101990; second, John Graham & Son on 102002; third, Geo. Hauser & Son on 103670; fourth, Geo. Hauser on 103669; fifth, C. C. Croxen.

Ram Under One Year ($7, $5, $4, $3, $2)—First, John Graham & Son; second, John Graham & Son; third, C. C. Croxen; fourth, F. H. Osen & Sons; fifth, C. C. Croxen.

Ewe Two Years Old or Over ($7, $5, $4, $3, $2)—First, Geo. Hauser & Son on 103657; second, John Graham & Son on 10118; third, Geo. Hauser & Son on 98100; fourth, John Graham & Son on 97942; fifth, F. H. Osen & Sons on 92315.

Ewe One Year Old and Under Two ($7, $5, $4, $3)—First, John Graham & Son on 101992; second, Geo. Hauser & Son on 103660; third, John Graham & Son on 101993; fourth, Geo. Hauser & Son on 103668.

Ewe Under One Year ($7, $5, $4, $3, $2)—First, John Graham & Son; second, Geo. Hauser & Son; third, John Graham & Son; fourth, Geo. Hauser & Son; fifth, F. H. Osen & Sons.

Ram, Any Age ($5)—First, John Graham & Son on aged ram.

Ewe, Any Age ($5)—First, Geo. Heauser & Son on aged ram.

Flock ($9, $7, $5, $3)—First, Geo. Hauser & Son; second, John Graham & Son; third, F. H. Osen & Sons; fourth, C. C. Croxen.

Get of Sire ($9, $7, $5, $3)—First, John Graham & Son; second, F. H. Osen & Sons; third, Geo. Hauser & Son; fourth, C. C. Croxen.

SPECIAL PRIZES OFFERED BY AMERICAN OXFORD DOWN RECORD ASSOCIATION

Best Yearling Ram ($10, $6, $4)—First, John Graham & Son on 101990; second, John Graham & Son on 102002; third, Geo. Hauser & Son on 103670.

Best Yearling Ewe ($10, $6, $4)—First, John Graham & Son on 101992; second, Geo. Hauser & Son on 103660; third, John Graham & Son on 101993.

Best Pen Four Lambs, Either Sex ($10, $8, $6)—First, John Graham & Son; second, F. H. Osen & Sons; third, Geo. Hauser & Son.

SOUTHDOWN

JUDGE..............................W. C. COFFEY, St. Paul, Minn.

Ram Two Years Old or Over ($10, $8, $6, $4)—First, Heatherhall Farms; second, E. E. Bitterman on 40021; third, C. A. Taylor; fourth Heatherhall Farms.

Ram One Year Old and Under Two ($10, $8, $6, $4)—First, E. G. Uhl; second, E. L. Bitterman; third, Heartherhall Farms; fourth, Iowa State College on 41749.

Ram Under One Year ($10, $8, $6, $4)—First, Iowa State College; second, Iowa State College; third, C. A. Taylor; fourth, C. A. Taylor.

Ewe Two Years Old or Over ($10, $8, $6, $4)—First, Iowa State College on 40416; second, Heatherhall Farms on 35652; third, E. G. Uhl on 40415; fourth, E. L. Bitterman on 36162.

Ewe One Year Old and Under Two ($10, $8, $6, $4)—First, Iowa State College on 41754; second, Iowa State College on 41753; third, C. A. Taylor; fourth, Heatherhall Farms.

Ewe Under One Year ($10, $8, $6, $4)—First, Heatherhall Farms; second, Heatherhall Farms on 2608; third, E. G. Uhl; fourth, Iowa State College on 42873.

Ram, Any Age ($5)—First, Heatherhall Farms.

Ewe, Any Age ($5)—First, Iowa State College on yearling ewe.

Flock ($9, $7, $5, $3)—First, Heatherhall Farms; second, Iowa State College; third, E. G. Uhl; fourth, C. A. Taylor.

Get of Sire ($9, $7, $5, $3)—First, Iowa State College; second, C. A. Taylor; third, E. G. Uhl; fourth, E. L. Bitterman.

DORSET

JUDGE..............................W. C. COFFEY, St. Paul, Minn.

Ram Two Years Old or Over ($6, $4, $2)—First, Edmund Hanson; second, Heatherhall Farms; third, C. C. Croxen.

Ram One Year Old and Under Two ($6, $4, $2)—First, Edmund Hanson; second, C. C. Croxen; third, Edmund Hanson.

Ram Under One Year ($6, $4)—First, Edmund Hanson; second, Edmund Hanson.

Ewe Two Years Old or Over ($6, $4, $2)—First, Heatherhall Farms; second, C. A. Taylor on Rose 2d 24393; third, Edmund Hanson.

Ewe One Year Old and Under Two ($6, $4, $2)—First, Heatherhall Farms; second, Edmund Hanson; third, Edmund Hanson.

Ewe Under One Year ($6, $4, $2)—First, Heatherhall Farms; second, Edmund Hanson; third, C. C. Croxen.

Ram, Any Age ($5)—Champion, Edmund Hanson on aged ram.

Ewe, Any Age ($5)—Champion, Heatherhall Farms on yearling ewe.

Flock ($10, $8, $6)—First, Heatherhall Farms; second, Edmund Hanson; third, C. C. Croxen.

Get of Sire ($10)—First, Edmund Hanson.

CHEVIOT

JUDGE................................W. C. COFFEY, St. Paul, Minn.

Ram Two Years Old or Over ($6, $4, $2)—First, Maple Grove Farm on 9945; second, Archie R. Minish on Blue Grass 307 12532; third, Maple Grove Farm on 12454.

Ram One Year Old and Under Two ($6, $4, $2)—First, Maple Grove Farm on 13455; second, Archie R. Minish on Lester 13661; third, Archie R. Minish on Louis 13659.

Ram Under One Year ($6, $4, $2)—First, Archie R. Minish on Minish 35 14008; second, Archie R. Minish on Minish 30 14007; third, Maple Grove Farm.

Ewe Two Years Old or Over ($6, $4, $2)—First, Archie R. Minish on Lucy 13654; second, A. J. Minish & Son on Tena 13472; third, Elmer Frye & Sons on Maple Grove 278 11515.

Ewe One Year Old and Under Two ($6, $4, $2)—First, Archie R. Minish on Laura 13657; second, Maple Grove Farm on 13454; third, C. C. Croxen.

Ewe Under One Year ($6, $4, $2)—First, Archie R. Minish on Bess 14004; second, Archie R. Minish on Jean 14005; third, Maple Grove Farm.

Champion Ram, Any Age ($5)—Maple Grove Farm on aged ram.

Champion Ewe, Any Age ($5)—A. R. Minish on aged ewe.

Flock ($10, $8, $6)—First, Archie R. Minish; second, Maple Grove Farm; third C. C. Croxen.

Get of Sire ($10, $8)—First, Archie R. Minish; second, C. C. Croxen.

WOOL EXHIBIT

Pure Bred Exhibit

JUDGE................................C. J. FAUCETT, Chicago, Ill.

Merino Ram Fleece ($3, $2, $1)—First, A. J. Blakely & Son; second, A. J. Blakely & Son; third, Joe W. Edgar.

Merino Ewe Fleece ($3, $2, $1)—First, A. J. Blakely & Son; second, A. J. Blakely & Son; third, F. F. Warner.

Rambouillet Ram Fleece ($3, $2)—First, Iowa State College; second, Iowa State College.

Rambouillet Ewe Fleece ($3, $2)—First, Iowa State College; second, Iowa State College.

Shropshire Ram Fleece ($3, $2, $1)—First, Dan'l Leonard & Sons; second, Iowa State College; third, Iowa State College.

Shropshire Ewe Fleece ($3, $2, $1)—First, E. G. Uhl; second, Iowa State College; third, Dan'l Leonard & Sons.

Southdown Ram Fleece ($3, $2, $1)—First, Iowa State College; second, E. G. Uhl; third, Iowa State College.

Southdown Ewe Fleece ($3, $2, $1)—First, E. G. Uhl; second, Iowa State College; third, Iowa State College.

Hampshire Ram Fleece ($3, $2, $1)—First, Iowa State College; second, Iowa State College; third, E. G. Uhl.

Hampshire Ewe Fleece ($3, $2, $1)—First, Iowa State College; second, E. G. Uhl; third, Iowa State College.

Oxford Ram Fleece ($3, $2, $1)—First, Iowa State College; second, John Graham & Son on 101990; third, Iowa State College.

Oxford Ewe Fleece ($3, $2, $1)—First, E. G. Uhl; second, Iowa State College; third, Iowa State College.

Cheviot Ram Fleece ($3, $2, $1)—First, Archie R. Minish; second, Maple Grove Farm; third Maple Grove Farm.

Cheviot Ewe Fleece ($3, $2, $1)—First, Maple Grove Farm; second, Maple Grove Farm; third, Archie R. Minish.

Cotswold Ram Fleece ($3, $2, $1)—First, Joe W. Edgar; second, Joe W. Edgar; third, Maple Grove Farm.

Cotswold Ewe Fleece ($3, $2, $1)—First, Maple Grove Farm; second, J. W. Edgar; third, J. W. Edgar.

MARKET CLASS EXHIBIT

Fine Staple ($10, $8, $6, $4, $2)—First, F. F. Warner; second, A. J. Blakely & Son; third, A. J. Blakely & Son; fourth, F. F. Warner; fifth, Iowa State College.

One-Half Blood Staple ($10)—First, F. F. Warner.

Three-Eighths Blood Staple ($10, $8, $6, $4, $2)—First, E. G. Uhl; second, Iowa State College; third, D. W. Bruns; fourth, E. G. Uhl; fifth, Iowa State College.

One-Fourth Blood Staple ($10, $8, $6, $4, $2)—First, Iowa State College; second, Daniel Leonard & Son; third, Daniel Leonard & Son; fourth, E. G. Uhl; fifth, Daniel Leonard & Son.

Braid ($10, $8, $6)—First, Maple Grove Farm; second, Joe W. Edgar; third, Joe W. Edgar.

COUNTY EXHIBITS

Fine Wool, Eight Fleeces ($20, $15)—First, C. W. Clarke; second, Poweshiek County Wool Growers' Association.

Medium Wool, Eight Fleeces ($20, $15, $10)—First, E. G. Uhl; second, Poweshiek County Wool Growers' Association; third, D. W. Bruns.

COUNTY EXHIBITS, SPECIAL PRIZES

Fine Wool, Three Fleeces ($10, $8, $7)—First, A. J. Blakely & Son; second, F. F. Warner; third, Iowa State College.

Medium Wool, Three Fleeces ($10, $8, $7)—First, E. G. Uhl; second, Daniel Leonard & Sons; third, Iowa State College.

SHEARING EVENTS

Shearing with Power Machine by Professionals ($10, $7, $3, $2)—First, E. G. Uhl, Ames; second, J. A. Peasley, Indianola; third, E. D. Peasley, Indianola; fourth, C. H. Brown, Keokuk.

Shearing with Hand Shears by Professionals ($10, $7, $3)—First, C. A. Taylor, Ames; second, E. G. Uhl, Ames; third, C. H. Brown, Keokuk.

Shearing with Power Machine by Amateurs ($10, $7, $3, $2)—First, John Graham, Eldora; second, J. C. Morton, Indianola; third, Frank Osen, Anita; fourth, C. C. Croxen, West Liberty.

Shearing with Hand Shears by Amateurs ($10, $7, $3, $2)—First, Elmer Frye; second, John Graham; third, Frank Osen; fourth, C. C. Croxen.

Blocking and Trimming Sheep for Show Ring ($10, $8, $6, $4, $2)—First, E. G. Uhl, Ames; second, C. A. Taylor, Ames; third, Angus Moore, Mt. Pleasant; fourth, C. H. Brown, Keokuk; fifth, D. W. Bruns, Sigourney.

GOAT DEPARTMENT

Exhibitors—N. Bartholomew, 216 Good Blk., Des Moines; O. H. Kale, 4020 10th St., Des Moines; O. R. Sheets, Des Moines, R. 3.

Milch Goats

TOGGENBURG

Pure Bred

Judge..............................O. H. Gillespie, Grinnell, Iowa.

Buck Under Six Months ($5, $3, $2)—First, N. Bartholomew on Glen Dell Jeff 17329; second, O. R. Sheets on Glen Dell Irox 17332; third, N. Bartholomew on Glen Dell Superb 17328.

Doe Two Years Old or Over ($5, $3)—First, N. Bartholomew on Glen Dell Fenette 5145; second, N. Bartholomew on Glen Dell Marie 12883.

Doe One Year Old and Under Two ($5, $3)—First, N. Bartholomew on Glen Dell Dolly 12884; second, O. R. Sheets on Glenn Dell Fawn 12894.

Doe Under One Year ($5)—First, N. Bartholomew on Glenn Dell Connie 17330.

REGISTERED TOGGENBURG

Doe Two Years Old or Over ($5, $3)—First, N. Bartholomew on Glen Dell Flota 12287; second, N. Bartholomew on Glen Dell Lucy 5143.

Doe One Year Old and Under Two ($5, $3)—First, N. Bartholomew on Glen Dell Carrie 12875; second, N. Bartholomew on Glen Dell Ruth 12881.

Doe Under One Year ($5, $3)—First, N. Bartholomew on Glenn Dale Judy 17333; second, N. Bartholomew on Glenn Dale Aleka 17334.

Champion Doe ($5)—First, N. Bartholomew on Glenn Dell Dolly 12884.

NUBIAN

Pure Bred

Buck Under Six Months ($5, $3, $2)—First, N. Bartholomew on Glenn Dale Colateral 17327; second, O. R. Sheets on Glen Dell Buehl; third, N. Bartholomew on Glen Dale King Dodo.

Doe One Year Old and Under Two ($5, $3, $2)—First, O. R. Sheets on Glen Dell Zeta P-2386; second, N. Bartholomew on Glenn Dale Una 12892; third, N. Bartholomew on Glenn Dale Lorna 12893.

Doe Under One Year ($5, $3, $2)—First, N. Bartholomew on Glen Dale Javeline 17326; second, N. Bartholomew on Glen Dale Fancy; third, O. R. Sheets on Glen Dell Helen.

NUBIAN

Registered Nubian

Doe Two Years Old or Over ($5, $3, $2)—First, O. R. Sheets on Glen Dell Joy G-2741; second, N. Bartholomew on Glue Bells G-1211; third, N. Bartholomew on Glen Dell Mignon G-2275.

Doe One Year Old and Under Two ($5, $3, $2)—First, O. R. Sheets on Glen Dell Felice G-2795; second, N. Bartholomew on Glen Dell Blessie G-2397; third, O. R. Sheets on Glen Dell Phyllis 2794.

Doe Under One Year ($5, $3, $2)—First, O. R. Sheets on Glen Dell Gipsy; second, N. Bartholomew on Glen Dell Dimples; third, N. Bartholomew on Glenn Dell Princess.

Champion Doe ($5)—N. Bartholomew on Glen Dell Javelin 17326.

REGISTERED SAANENS

Doe Two Years Old or Over ($5)—N. Batholomew on Glen Dell May 17336.

Doe Under One Year ($5)—N. Bartholomew on Glen Dell Mena 17337.

Champion Doe ($5)—N. Bartholomew on Glen Dell Mena 17337.

PREMIER EXHIBITOR

Exhibitor Winning the Greatest Number of Points. First prize to count 3 points, second prize 2 points, third prize 1 point and 1 point for each goat exhibited ($30, $25)—First, N. Bartholomew; second, O. R. Sheets.

SPECIAL PRIZES

Offered by American Milk Goat Record Association

Champion Toggenburg Buck ($10, Special Ribbon)—N. Bartholomew on Glen Dell Jeff 17329.

Champion Toggenburg Doe ($10, Special Ribbon)—N. Bartholomew on Glen Dell Dolly 12884.

Champion Saanen Doe ($10, Special Ribbon)—N. Bartholomew on Glen Dell Mena 17337.

Champion Nubian Buck ($10, Special Ribbon)—N. Bartholomew on Glen Dell Colateral 17327.

Champion Nubian Doe ($10, Special Ribbon)—N. Bartholomew on Glen Dell Javelin 17326.

BOYS' AND GIRLS' SHEEP DEPARTMENT

EXHIBITORS—William Anderson, West Liberty; Lucy Anderson, West Liberty; Winifred Anderson, Muscatine; Marion Anderson, Muscatine; Ivan Beck, Corning; Lawrence Beck, Corning; Evelyn Beck, Ontario; Charlotte Beck, Ames; Clarence W. Beck, Ontario; Lester Beck, Ames; John Campbell, Mt. Pleasant; Leota Baily, Muscatine; Ethel Birkett, Muscatine; Raymond Cleland, Ewart; Ernest T. Eness, Gilbert; Clifford Fregermuth, Muscatine; Loucilla Gildersleeve, Gilbert; Guy Gosenberg, West Liberty; Paul Greyson, Montezuma; Zona D. Hanshaw, Douds; Einer Jensen, Ames; Donald Nichols, West Liberty; Archie Nichols, West Liberty; Romayne Porter, Ames; Lyle B. Porter, Ames; Edwin Parish, Grinnell; Melvin Pierson, West Branch; Mary Probst, Muscatine; Lillian Pemberton, Muscatine; Virginia Reed, Ames; Gale Reed, Ames; Elsie Shark, Ames; Lucille Sayre, Eldora; Clifton Schultz, Malcom; Orrie Tweed, Jewell; Arnold Tweed, Jewell; Beatrice Tweed, Ames; Glen C. Uhl, Ames; Ina Wick, Mt. Pleasant; Vernon Wright, West Liberty.

JUDGE..............................P. S. SHEARER, Ames, Iowa.

SHROPSHIRE SECTION

Ram Lamb ($10, $8, $5)—First, Ina Wick; second, Ivan Beck on A. Leonard; third, Ivan Beck on Silver.

Ewe Lamb ($10, $8, $5)—First, John Campbell; second, Elsie Sharp on Edna 1091; third, Lawrence Beck on Mable.

OXFORD SECTION

Ram Lamb ($10, $8)—First, Virginia Reed on I. S. C. 1021; second, Gale Reed on Buster I. S. C. 1134.

Ewe Lamb ($10, $8, $5, $4, $3)—First, Lyle B. Porter on Bess; second, Orrie Tweed on Susie 16; third, Lucille Sayre on Graham 1685; fourth, Gale Reed on Betty I. S. C. 1135; fifth, Virginia Reed on I. S. C. 1058.

HAMPSHIRE SECTION

Ram Lamb ($10, $8, $5, $3, $2)—First, Clarence W. Beck on Terry 2; second, Clarence W. Beck on Jerry 1; third, Ernest T. Eness on Eness 50; fourth, Orrie Tweed on Tommy 9; fifth, Orrie Tweed on Christopher 10.

Ewe Lamb ($10, $8, $5, $3, $2)—First, Arnold Tweed on Marjorie; second, Orrie Tweed on Uhl 21; third, Lester L. Beck on Queen Iowan; fourth, Evelyn E. Beck on Olive Bell; fifth, Charlotte E. Beck on Lady Williamette.

SOUTHDOWN SECTION

Ram Lamb ($8, $6)—First, Glen C. Uhl on Uhl 5; second, Beatrice Tweed on Uhl 15.

Ewe Lamb ($8, $6, $3)—First, Glen C. Uhl on Uhl 6; second, Beatrice Tweed on Uhl 4; third, Beatrice Tweed on Uhl 3.

DELAINE SECTION

Ram Lamb ($8, $6)—First, Edwin Perish; second, Paul Greyson.

Ewe Lamb ($8, $6, $3, $2, $2)—First, Paul Greyson; second, Clifton Schultz; third, Raymond Cleland; fourth, Clifton Schultz; fifth, Raymond Cleland.

Champion Ram Lamb, All Breeds ($6)—Ina Wick on Shropshire ram.

Champion Ewe Lamb, All Breeds ($6)—John Campbell.

FAT CLASSES

Wether or Ewe ($8, $7, $5, $4, $3, $2, $2, $2)—First, Melvin Pierson; second, Lillian Pemberton; third, William Anderson; fourth, Mary Probst; fifth, Ethel Birkett; sixth, Vernon Wright; seventh, Lucy Anderson; eighth, Marion Anderson.

County Sheep Club Exhibit of Eight Lambs ($15, $12, $10)—First, Story County Pure Bred Ewe and Lamb Club; second, Poweshiek County; third, Story County Pure Bred Ewe and Lamb Club.

BOYS' AND GIRLS' FLEECE WOOL EXHIBIT

Fleece Exhibited by Individuals

One-Fourth Blood ($3, $2, $1, $1, $1, $1, $1)—First, Elsie Sharp; second, Arnold Tweed; third, Arnold Tweed; fourth, Evelyn E. Beck; fifth, Beatrice Tweed; sixth, Glen C. Uhl; seventh, Beatrice Tweed.

Three-Eighths Blood ($3, $2, $1, $1)—First, Elsie Sharp; second, Lyle B. Porter; third, Evelyn E. Beck; fourth, Lester L. Beck.

County Exhibit of at Least Six Fleeces Other Than Fine Wool ($10, $8)—First, Story County Pure Bred Ewe and Lamb Club; second, Story County Pure Bred Ewe and Lamb Club.

JUDGE................................C. J. FAUCETT, Chicago, Ill.

POULTRY DEPARTMENT

SUPERINTENDENT...................V. G. WARNES, Bloomfield, Iowa.

JUDGES................
E. C. BRANCH, Lees Summit, Iowa.
HARRY ATKINS, Davenport, Iowa.
E. D. MONILAW, Cedar Rapids, Iowa.
OSCAR GRON (Water Fowls), Waterloo, Iowa.

EXHIBITORS—Paul O. Alex, Coon Rapids; A. L. Anderson, S. W. 13th and Pleasant St., Des Moines; C. R. Anderson, Indianola; Marshall Ashworth, 1440 47th St., Des Moines; R. C. Bair & Son, Humboldt; Fred Bell, Boone; John F. Bargenholt, Orient; H. H. Burkheimer, Lorimor; Mrs. Olaf Benson, Sioux Rapids; John Buck, Iowa City; Neva A. Bridie, Mingo; O. M. Brown, Slater; R. Budatz, R. F. D. 5, Council Bluffs; John Bruce, Monroe; H. M. Beaver, 2816 Sheridan St., Davenport; H. S. Boyce, 56th and Hickman, Des Moines; W. H. Boyce, 2413 Elizabeth Ave., Des Moines; Mrs. O. C. Bierma, R. F. D. 5, E. Des Moines; Geo. Beard, Bedford; E O. Birchard, R. F. D. 3, Waterloo; D. W. Bruns, Sigourney; L. D. Carpenter, Indianola; Thos. Cooke, 2216 Clark St., Des Moines; W. R. Cummings, Sr., Perry; L. B. Calbreath & Son, 527 S. 15th St., Keokuk; W. J. Coffin & Son, Waverly; Jas. J. Clarke, Monroe; Web Clements, Agency; Charles E. Diehl, Ft. Des Moines; L. E. Dickensheets, 47th and Douglas, R. No. 302, Des Moines; L. F. Davis, Lorimor; D. D. Dailey, 1099 W. 63rd St. Des Moines; Albert Doerder, R. F. D. No. 2, Boone; F. A. Davis, Waverly; Dr. H. E. Day & Sons, Dumont; Mrs. Verla Dunlap, Altoona; Gerald R. Duncan, R. No. 1, Columbus Jct.; Kermet Donnelly, Ottumwa; Geo. Dickey, 1210 4th Ave., Rock Island, Ill.; W. H. Ebersole, 1549 Hull Ave., Des Moines; E. A. Franquemont, 44th and Urbandale, Des Moines; W. S. Fryer, Council Bluffs; Gerna Fouche, Osceola; Leo E. Fahritz, Ottumwa; Harry Firkins, E. 24th and Guthrie, Des Moines; Ardis Farley, Indianola; Mrs. Frank Fritz, Earlham; Mrs. C. D. Freel, Runnells; Pauline Fitzsimmons, Ottumwa; J. T. Fletcher, What Cheer; Everett A. Farnham, Box 691, Valley Junction; Gerald Gay, Beacon; Mrs. E. C. Grace, 1003 63rd St. Des Moines; Frank V. Gipple, Columbus Junction; Griffiths Bros., R. F. D. No. 3, Des Moines; C. A. Goss, Des Moines; T. M. Hayden, Creston; Mrs. Florence Hast, Box 110, Des Moines; Mrs. L. L. Hunter, Drakesville; Mrs. J. E. Hull, R. R. No. 6, Box 58, Oskaloosa; Mrs. M. R. Hess, Oskaloosa; Wm. A. Hoos, 2016 20th St., Des Moines; Wm. Herink, Chelsea; Edmund Hanson, Dean; H. C. Hunt, Delavan, Ill.; Fred C. Hacke, Indianola; Mrs. C. W. Hendrick, Murray; M. B. Howe, Cedar Falls; T. H. Hall, Box 432, Des Moines; Archie Hart, Rock Island, Ill.; Weir Hart, Bondurant; M. A. Heifner, 56th and Hickman Ave., Des Moines; Mrs. F. Hoppe, Danbury; Liston L. Hall, Box 12, Council Bluffs; C. D. Joslin, Holstein; Jersey Ridge Poultry Farm, R. F. D. No. 1, Davenport; F. W. Johnson, Monroe; Chas. E. Jones, Coon Rapids; W. L. Johnson, Brooklyn; H. M. & R. M. Jones, 2984 Easton Blvd., Des Moines; Mrs. Chalmers W. Johnson, R. F. D. No. 1, Oskaloosa; F. S. Jordan, Springville; M. L. Jones, Gladbrook; H. E. Johnson, Monroe; Kellogg & Kellogg, Cambridge, Ill.; W. L. & W. R. Kiel, 534 4th St. Ft. Madison; Kelley Poultry Farm, Wilton Junction; Mrs. F. H. Kronenberg, Walcott; August Klepke & Son, Eldora; A. N. Kirr, Morrison, Ill.; J. W. Laird, Mt. Pleasant; Karl E. Larson, Mitchellville; D. Locker, 44 Urbandale, Des Moines; Oscar Larson, Clarion; Ira Luse, R. R. No. 7, Osceola; C. M. Livingston, Monroe; Leora Leonard, Mingo; Wm. Lund, 813 E. 9th St., Muscatine; Wm. McMichael, 2434 S. E. 6th St., Des Moines; F. J. McFarland, 2346 S. 7th St., Des Moines; Ina Morton, Indianola; John J. Moore, Atlantic; Albert Mather, R. No. 3, Des Moines; J. T. Molloy & Sons, Albion; Chester L. Mason, Early; Rev. F. A. Moore, Grinnell; J. F. Meilike, Altoona; H. S. Masimore, 2425 S. E. 5th St., Des Moines; Oakmoor Poultry Farm, 2801 Hickman Ave., Des Moines; M. F. Nielson, 3016 Carr St., Des Moines; Theo. W. Happe, Carroll; W. H. Patton, R. No. 1, Iowa City; J. W. Pearson, Mitchellville; Dr. W. J. Pirie, Springville; Virgil W. Peterson, Olds; S. H. Page, Waverly; Chas. C. Peck, Waverly; C. L. Priest, 2923 E. Grand Ave., Des Moines; Mrs. A. E. Peters, Corning; Geo. S. Phillips, 1218 7th St., Des Moines; Ira Pfantz, State Center; Mrs. E. S. Randall, R. No. 3, Sigourney; S. F. Raff, Springville; Walter Russell, Indianola; John Reimon, Jefferson; Roup & Son, Ames; Albert J. Ruess, West Liberty; W. C. Runft, Reinbeck; Fred G. Reis, Indianola; E. H. Rucker, Ottumwa; F. L. Reinhard & Son, 217 N. Sheridan Ave., Ottumwa; Harold Schabilion, Columbus Jct.; R. R. Shrock, Des Moines; Emlin Smith, Mt. Ayr; Miss Frona B. Stephenson, R. No. 3, Box 3, Maryville, Mo.; Miss Celia Simons, Farragut; James F. Steele, R. No. 1, Eddyville; Thos. Smillie, Box 81, Hocking; Mrs. Millard Thompson, Polk City; Mrs. H. A. Taylor, 58th and University, Des Moines; J. H. Todd, Villisca; Lee Taylor, Mitchellville; W. S. Turk, 2601 Logan Ave., Des Moines; Mrs. L. R. Van Velson, R. No. 5, Creston; C. & C. T. Van Lint, Pella; Mrs. V. G. Warner, Bloomfield; Mrs. Mary Wagner, Ankeny; H. V. Wright, 1227 Clark Ave., Ames; Dana Walters, P. O. Dept., Des Moines; Marvin M. Walters, Joy, Ill.; H. J. Wieman, Burlington; G. M. Wormley, State Center; Julius Wegner, 1448 Pleasant St., Davenport; F. F. Wisecup, Woodward; W. F. Wallace, R. No. 1, Des Moines; George Wagner, Ottumwa.

SWEEPSTAKES, AMERICAN CLASS

Best Cockerel (Silver Loving Cup)—D. Locker on Single Comb Rhode Island Red.

Best Pullet (Silver Loving Cup)—H. V. Wright on White Wyandotte.

AMERICAN

Barred Plymouth Rock Cockerel Bred Cock, 21 entries ($3, $2, $1, $1)—First, Gerno Fouche on 9; second, Marvin M. Walters on 76; third, F. L. Reinhard; fourth, F. L. Reinhard.

Barred Plymouth Rock Cockerel Bred Cockerel, 18 entries ($3, $2, $1, $1)—First, S. H. Page on 50; second, Mrs. F. H. Kronenberg on 39; third, Wm. A. Hoos on 11; fourth, Marvin W. Walters on 274.

Barred Plymouth Rock Cockerel Bred Hen, 16 entries ($3, $2, $1, $1)—First, S. H. Page on 43; second, Marvin M. Walters on 18; third, John Reiman & Son on 36; fourth, W. H. Boyce on 81.

Barred Plymouth Rock Cockerel Bred Pullet, 20 entries ($3, $2, $1, $1)—First, S. H. Page on 46; second, Mrs. F. H. Kronenberg on 24; third, Marvin M. Walters on 263; fourth, John Reiman & Son on 104.

Barred Plymouth Rocks Cockerel Bred Pen Fowls, 6 entries ($5, $3, $2)—First, William McMichael; second, L. B. Calbreath; third, S. H. Page.

Barred Plymouth Rocks Cockerel Bred Pen Chicks, 16 entries ($5, $3, $1)—First, H. H. Burkheimer; second, T. J. McFarland; third, Wm. A. Hoos.

Barred Plymouth Rocks Pullet Bred Cock, 6 entries ($3, $2, $1, $1)—First, L. H. Page on 72; second, John Reimann & Son on 18; third, John Reiman & Son on 5; fourth, John Reiman & Son on 41.

Barred Plymouth Rock Pullet Bred Cockerel, 6 entries ($3, $2, $1, $1)—First, John Reiman & Son on 100; second, S. H. Page on 90; third, John Reiman & Son on 107; fourth, Marvin M. Walters on 155.

Barred Plymouth Rock Pullet Bred Hen, 8 entries ($3, $2, $1, $1)—First, Marvin M. Walters on 72; second, S. H. Page on 3407; third, Marvin M. Walters on 214; fourth, John Reiman & Son on 42.

Barred Plymouth Rock Pullet Bred Pullet, 9 entries ($3, $2, $1, $1)—First, S. H. Page on 30; second, John Reiman & Son on 87; third, John Reiman & Son on 86; fourth, Marvin M. Walters on 211.

Barred Plymouth Rocks Pullet Bred Pen Fowls, 3 entries ($5, $3, $1)—First, John Reiman & Son; second, John Reiman & Son; third, L. B. Calbreath & Son.

Barred Plymouth Rocks Pullet Bred Pen Chicks, 3 entries ($5, $3, $1)—First, John Reiman & Son; second, John Reiman & Son; third, S. H. Page

White Plymouth Rock Cock, 5 entries ($3, $2)—First, Mrs. L. L. Hunter on 12; second, F. W. Johnson on 14.

White Plymouth Rock Cockerel, 13 entries ($3, $2, $1, $1)—First, Jersey Ridge Poultry Farm on 195; second, Chas. C. Peck on 97; third, J. M. Pearson on 77; fourth, Mrs. L. L. Hunter on 11.

White Plymouth Rock Hen, 8 entries ($3, $2, $1, $1)—First, L. E. Dickensheets on 81; second, Mrs. L. L. Hunter on 11; third, L. E. Dickensheets on 80; fourth, F. W. Johnson on 100.

White Plymouth Rock Pullet, 13 entries ($3, $2, $1, $1)—First, L. E. Dickensheets on 63; second, L. E. Dickensheets on 62; third, Jersey Ridge Poultry Farm on 143; fourth, D. D. Dailey on 24.

White Plymouth Rock Pen Fowls, 1 entry ($5)—First, Mrs. L. L. Hunter.

White Plymouth Rock Pen Chicks, 7 entries ($5, $3, $1)—First, Jersey Ridge Poultry Farm; second, L. E. Dickensheets; third, D. D. Dailey.

Buff Plymouth Rock Cock, 3 entries ($3, $2)—First, John Burk on 1; second, Kellogg & Kellogg on 40.

Buff Plymouth Rock Cockerel, 5 entries ($3, $2, $1)—First, Walter Russell on 393; second, John Burk on 2; third, Emlin Smith on 19.

Buff Plymouth Rock Hen, 4 entries ($3, $2, $1, $1)—First, T. H. Hall on 195; second, Neva A. Bridie on 54; third, Kellogg & Kellogg on 10; fourth, Neva A. Bridie on 44.

Buff Plymouth Rock Pullet, 9 entries ($3, $2, $1, $1)—First, John Burk on 3; second, T. H. Hall on 200; third, T. H. Hall on 142; fourth, Kellogg & Kellogg on 52.

Buff Plymouth Rock Pen Fowls, 2 entries ($5, $3)—First, Walter Russell; second, Neva Bridie.

Buff Plymouth Rock Pen Chicks, 4 entries ($5, $3, $1)—First, Walter Russell; second, John Burk; third, T. H. Hall.

Partridge Plymouth Rock Cock, 9 entries ($2, $1, 75 cents, 50 cents)—First, Dr. W. J. Pirie on 67; second, S. F. Raff on 23; third, Dr. W. J. Pirie on 26; fourth, S. H. Page on 74.

Partridge Plymouth Rock Cockerel, 8 entries ($2, $1, 75 cents, 50 cents) —First, S. H. Page on 65; second, S. F. Raff on 8; third, S. F. Raff on 4; fourth, S. F. Raff on 7.

Partridge Plymouth Rock Hen, 9 entries ($2, $1, 75 cents, 50 cents)—First, Dr. J. W. Pirie on 14; second, S. F. Raff on 70; third, Dr. J. W. Pirie on 21; fourth, S. F. Raff on 11.

Partridge Plymouth Rock Pullet, 9 entries ($2, $1, 75 cents, 50 cents) —First, Kellogg & Kellogg on 43; second, S. F. Raff on 6; third, Mrs. C. W. Hendrick on 11; fourth, Dr. W. J. Pirie on 12.

Partridge Plymouth Rock Pen Fowls, 1 entry ($5)—First, Dr. W. J. Pirie.

Partridge Plymouth Rock Pen Chicks, 4 entries ($5, $3, $1)—First, S. H. Page; second, Mrs. C. W. Hendrick; third, H. S. Boyce.

Silver Wyandotte Cock, 6 entries ($3, $2, $1, $1)—First, Mrs. V. G. Warner; second, C. R. Anderson on 13; third, J. H. Todd on 54; fourth, Albert J. Ruess on 28.

Silver Wyandotte Cockerel, 9 entries ($3, $2, $1, $1)—First, Mrs. V. G. Warner; second, Mrs. V. G. Warner; third, J. H. Todd on 63; fourth, A. L. Anderson on 18.

Silver Wyadotte Hen, 8 entries ($3, $2, $1, $1)—First, J. H. Todd on 53; second, Albert J. Ruess on 30; third, Mrs. V. G. Warner; fourth, A. L. Anderson on 19.

Silver Wyandotte Pullet, 10 entries ($3, $2, $1, $1)—First, Mrs. V. G. Warner; second, J. H. Todd on 88; third, R. R. Shrock on 15; fourth, J. H. Todd on 98.

Silver Wyandotte Pen Fowls, 3 entries ($5, $3, $1)—First, J. H. Todd; secod, A. L. Anderson; third, Walter Perkins.

Silver Wyandotte Pen Chicks, 3 entries ($5, $3)—First, Mrs. V. G. Warner; second, Walter Perkins.

Golden Wyandotte Cock, 2 entries ($3, $2)—First, A. L. Anderson on 1; second, M. Lund on 15.

Golden Wyandotte Cockerel, 2 entries ($3)—First, A. L. Anderson on 2.

Golden Wyandotte Hen, 3 entries ($3, $2,)—First, A. L. Anderson on 4; second, A. L. Anderson on 3.

Golden Wyandotte Pullet, 3 entries ($3, $2, $1)—First, A. L. Anderson on 5; second, A. L. Anderson on 7; third, A. L. Anderson on 6.

Golden Wyandotte Pen Fowls, 1 entry ($5)—First, A. L. Anderson.

Golden Wyandotte Pen Chicks, 1 entry ($5)—First, A. L. Anderson.

White Wyandotte Cock, 12 entries ($3, $2, $1, $1)—First, A. N. Kirr on

2; second, M. A. Heifner on 1; third, H. M. Beaver on 8; fourth, H. M. Beaver on 21.

White Wyandotte Cockerel, 20 entries ($3, $2, $1, $1)—First, A. N. Kirr on 5; second, H. M. Beaver on 15; third, H. M. Beaver on 18; fourth, H. M. Beaver on 16.

White Wyandotte Hen, 11 entries ($3, $2, $1, $1)—First, J. W. Laird on 10; second, M. A. Heifner on 52; third, W. H. Ebersole on 11; fourth, Oakmoor Poultry Farm on 51.

White Wyandotte Pullet, 31 entries ($3, $2, $1, $1)—First, H. V. Wright on 62; second, Mrs. Frank Fritz on 49; third, E. O. Birchard on 17; fourth, E. O. Birchard on 19.

White Wyandotte Pen Fowls, 3 entries ($5, $3, $1)—First, M. A. Heifner; second, W. H. Ebersole; third, A. N. Kirr.

White Wyandotte Pen Chicks, 6 entries ($5, $3, $1)—First, Oakmoor Poultry Farm; second, M. A. Heifner; third, W. H. Ebersole.

Buff Wyandotte Cock, 1 entry ($2)—First, W. J. Coffin & Sons on 52.

Buff Wyadotte Cockerel, 1 entry ($2)—First, W. J. Coffin & Sons on 53.

Buff Wyandotte Pullet, 2 entries ($2, $1)—First, W. J. Coffin & Sons on 40; second, W. J. Coffin & Sons on 51.

Buff Wyandotte Pen Chicks, 1 entry ($5)—First, W. J. Coffin & Sons.

Partridge Wyandotte Cock, 3 entries ($3, $2)—First, W. J. Coffin & Sons on 25; second, W. J. Coffin & Sons on 79.

Partridge Wyandotte Cockerel, 1 entry ($3)—First, H. M. Beaver on 54.

Partridge Wyandotte Hen, 3 entries ($3, $2)—First, W. J. Coffin & Sons on 100; second, W. J. Coffin & Sons on 62.

Partridge Wyandotte Pen Fowls, 1 entry ($5)—First, W. J. Coffin & Sons.

Silver Penciled Wyandotte Cockerel, 1 entry ($2)—First, Mrs. V. G. Warner.

Silver Penciled Wyandotte Hen, 1 entry ($2)—First, Mrs. V. G. Warner.

Single Comb Rhode Island Red Cock, 24 entries ($3, $2, $1, $1)—First, F. L. Reinhard & Son on 12; second, Fred Bell on 85; third, D. Locker on 74; fourth, Dr. W. P. Cummings on 100.

Single Comb Rhode Island Red Cockerel, 21 entries ($3, $2, $1, $1)—First, D. Locker on 54; second, Archie Hart on 189; third, G. F. Wisecup on 100; fourth, D. Locker on 52.

Single Comb Rhode Island Red Hen, 19 entries ($3, $2, $1, $1)—First, Karl E. Larson on 60; second, E. H. Rucker on 87; third, G. F. Wisecup on 99; fourth, Dana Wagner on 80.

Single Comb Rhode Island Red Pullet, 27 entries ($3, $2, $1, $1)—First, D. Locker on 57; second, D. Locker on 56; third, E. H. Rucker on 77; fourth, E. H. Rucker on 76.

Single Comb Rhode Island Red, Pen Fowls, 7 entries ($5, $3, $1)—First, D. Locker; second, E. H. Rucker; third, Liston L. Hall.

Single Comb Rhode Island Red, Pen Chicks, 12 entries ($5, $3, $1)—First, G. F. Wisecup; second, D. Locker; third, E. H. Rucker.

Rose Comb Rhode Island Red Cock, 16 entries ($3, $2, $1, $1)—First, J. T. Fletcher on 29; second, W. F. Wallace on 35; third, M. L. Jones on 24; fourth, Harold Schabilion on 33.

Rose Comb Rhode Island Red Cockerel, 15 entries ($3, $2, $1, $1)—First, Harold Schabilion on 24; second, J. T. Fletcher on 25; third, W. H. Patton on 11; fourth, Harold Schabilion on 22.

Rose Comb Rhode Island Red Hen, 22 entries ($3, $2, $1, $1)—First, L. D. Carpenter on 8; second, Harold Schabilion on 14; third, Harold Schabilion on 32; fourth, Mrs. L. R. Van Velson on 101.

Rose Comb Rhode Island Red Pullet, 18 entries ($3, $2, $1, $1)—First,

J. T. Fletcher on 33; second, M. L. Jones on 20; third, Harold Schabilion on 26; fourth, Harold Schabilion on 28.

Rose Comb Rhode Island Red, Pen Fowls, 7 entries ($5, $3, $1)—First, L. D. Carpenter; second, Harold Schabilion; third, M. L. Jones; fourth, Mrs. L. R. Van Velson.

Rose Comb Rhode Island Red, Pen Chicks, 6 entries ($5, $3, $1)—First, W. H. Patton; second, L. D. Carpenter; third, M. L. Jones; fourth, Harold Schabilion.

EGG LAYING BODY CAPACITY TEST

AMERICAN CLASS

Pullet Mating Barred Plymouth Rocks—First, John Reiman & Son on 42; second, Marvin Walters on 214; third, S. H. Page on 3407.

Cockerel Mating Barred Plymouth Rocks—First, Mrs. C. D. Freel on 116; second, S. H. Page on 33; third, Mrs. C. D. Freel on 124.

White Plymouth Rocks—First, Mrs. L. L. Hunter on 11; second, Neva A. Bridie on 40; third, Neva A. Bridie on 43.

Buff Plymouth Rocks—First, Neva A. Bridie on 44; second, Walter Russell on 386; third, Walter Russell on 389.

Partridge Plymouth Rocks—First, H. S. Boyce on 74; second, Dr. J. W. Pirie on 22; third, Kellogg & Kellogg on 9.

Single Comb Rhode Island Reds—First, F. L. Reinhard & Son on 465; second, Dr. W. P. Cummings on 99; third, E. H. Rucker on 87.

Rose Comb Rhode Island Reds—First, L. D. Carpenter on 17; second. Mrs. L. R. Van Velson on 101; third, M. L. Jones on 25.

Silver Laced Wyandottes—First, V. G. Warner on 3; second, J. H. Todd on 84; third, Walter Perkins on 59.

White Wyandottes—First, A. N. Kerr on 12; second, M. A. Heifner on 9; third, A. N. Kerr on 10.

Other Wyandottes—First, A. L. Anderson on 9; second, A. L. Anderson on 3; third, W. J. Coffin & Sons on 100.

ASIATIC

Sweepstakes, Asiatic Class, Best Cockerel (Silver Loving Cup)—H. S. Masimore on Buff Cochin 27.

Best Pullet (Silver Loving Cup)—Weir Hart on Light Brahma 28.

Egg Laying Body Capacity Test—First, H. M. & R. M. Jones on Light Brahma 4; second, H. S. Masimore on Buff Cochin 32; third, Weir Hart on Light Brahma 45.

Light Brahma Cock, 2 entries ($3)—First, H. M. & R. M. Jones on 1.

Light Brahma Cockerel, 6 entries ($3, $2, $1, $1)—First, Weir Hart on 40; second, Weir Hart on 4; third, Weir Hart on 6; fourth, H. M. & R. M. Jones on 3.

Light Brahma Hen, 4 entries ($3, $2, $1, $1)—First, Weir Hart on 36; second, Weir Hart on 37; third, Weir Hart on 48; fourth, H. M. & R. M. Jones on 4.

Light Bramha Pullet, 6 entries ($3, $2, $1, $1)—First, Weir Hart on 28; second, Weir Hart on 44; third, Weir Hart on 34; fourth, H. M. & R. M. Jones on 6.

Light Brahma, Pen Fowls, 1 entry ($5)—First, Weir Hart.

Light Brahma, Pen Chicks, 1 entry ($5)—First, Weir Hart.

Buff Cochin Cock, 3 entries ($1, 50 cents)—First, H. S. Masimore on 35; second, H. M. & R. M. Jones on 7.

Buff Cochin Cockerel, 5 entries ($1, 50 cents)—First, H. S. Masimore on 27; second, H. S. Masimore on 26.

Buff Cochin Hen, 4 entries ($1, 50 cents)—First, H. S. Masimore on 32; second, H. M. & R. M. Jones on 10.

Buff Cochin Pullet, 4 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 12; second, H. M. & R. M. Jones on 13.

Black Langshan Cock, 1 entry ($3)—First, Weir Hart on 39.

Black Langshan Cockerel, 4 entries ($3, $2, $1)—First, Weir Hart on 38; second, H. M. & R. M. Jones on 14; third, H. M. & R. M. Jones on 15.

Black Langshan Hen, 1 entry ($3)—First, Weir Hart on 27.

Black Langshan Pullet, 2 entries ($3)—First, Weir Hart on 31.

Black Langshan, Pen Chicks, 1 entry ($5)—First, Weir Hart.

White Langshan Cock, 1 entry ($2)—First, Mrs. J. E. Hull on 1.

White Langshan Cockerel, 2 entries ($2, $1)—First, Mrs. J. E. Hull on 2; second, W. C. Runft on 284.

White Langshan Hen, 2 entries ($2, $1)—First, Mrs. J. E. Hull on 3; second, Mrs. J. E. Hull on 4.

White Langshan Pullet, 2 entries ($2)—First, Mrs. J. E. Hull on 5.

MEDITERRANEAN

Sweepstakes, American Class, Best Cockerel (Silver Loving Cup)—Julius Wegner on 1.

Best Pullet (Silver Loving Cup)—John J. Moore on 5.

EGG LAYING BODY CAPACITY TEST

White Leghorns—First, Miss Celia Simmons on 10; second, Julius Wegner on 50; third, Mrs. H. A. Taylor on 7.

Other Than White Leghorns—First, Leora Leonard on Black Minorca 97; second, Kelleys Poultry Farm on Black Minorca 23; third, Gerald R. Duncan on Black Leghorn 47.

Single Comb Brown Leghorn Cock, 4 entries ($3, $2, $1, $1)—First, Leo E. Fahritz on 18; second, F. W. Johnson on 94; third, Leo E. Fahritz on 17; fourth, F. W. Johnson on 91.

Single Comb Brown Leghorn Cockerel, 3 entries ($3, $2, $1)—First, Leo E. Fahritz on 8; second, Leo E. Fahritz on 7; third, Leo E. Fahritz on 6.

Single Comb Brown Leghorn Hen, 4 entries ($3)—First, F. W. Johnson on 58.

Single Comb Brown Leghorn Pullet, 6 entries ($3, $2, $1, $1)—First, Mrs. Geo. McCollum on 14; second, Mrs. Geo. McCollum on 15; third, Leo E. Fahritz on 16; fourth, Leo E. Fahritz on 15.

Single Comb Brown Leghorn, Pen Fowls, 2 entries ($5)—First, Mrs. Geo. McCollum.

Single Comb Brown Leghorn. Pen Chicks, 2 entries ($5, $3)—First, Mrs. Geo. McCollum; second, Leo E. Fahritz.

Rose Comb Brown Leghorn Cock, 3 entries ($2, $1, 75 cents)—First, C. D. Joslin on 50; second, Gerald R. Duncan on 3; third, C. D. Joslin on 7.

Rose Comb Brown Leghorn Cockerel, 2 entries ($2)—First, Gerald R. Duncan on 4.

Rose Comb Brown Leghorn Hen, 4 entries ($2, $1, 75 cents, 50 cents)—First, C. D. Joslin on 3; second, C. D. Joslin on 62; third, Gerald R. Duncan on 6; fourth, Gerald R. Duncan on 5.

Rose Comb Leghorn Pullet, 2 entries ($2, $1)—First. Gerald R. Duncan on 7; second, C. D. Joslin on 36.

Single Comb White Leghorn Cock, 6 entries ($3, $2, $1, $1)—First, Julius Wegner on 19; second, Julius Wegner on 22; third, Julius Wegner on 49; fourth, W. F. Wallace on 259.

Single Comb White Leghorn Cockerel, 20 entries ($3, $2, $1, $1)—First, Julius Wegner on 1; second, Juiius Wegner on 4; third, John J. Moore on 22; fourth, Ina Morton on 15.

Single Comb White Leghorn Hen, 11 entries ($3, $2, $1, $1)—First, Julius Wegner on 6; second, Julius Wegner on 50; third, W. F. Wallace on 65; fourth, W. F. Wallace on 58.

Single Comb White Leghorn Pullet, 15 entries ($3, $2, $1, $1)—First, John J. Moore on 5; second, Julius Wegner on 5; third, Julius Wegner on 7; fourth, Mrs. H. A. Taylor on 11.

Single Comb White Leghorn Pen Chicks, 11 entries ($5, $3, $1)—First, Julius Wegner; second, Harry Firkins; third, Mrs. H. A. Taylor.

Single Comb Buff Leghorn Cock, 2 entries ($3)—First, Gerald R. Duncan on 9.

Single Comb Buff Leghorn Cockerel, 5 entries ($3, $2)—First, Frank V. Gippee on 1; second, Gerald R. Duncan on 10.

Single Comb Buff Leghorn Hen, 5 entries ($3, $2, $1)—First, Frank V. Gippee on 2; second, Gerald R. Duncan on 12; third, Gerald R. Duncan on 13.

Single Comb Buff Leghorn Pullet, 5 entries ($3, $2, $1)—First, Gerald R. Duncan on 15; second, Frank V. Gippee on 3; third, Gerald R. Duncan on 14.

Single Comb Buff Leghorn Pen Chicks, 2 entries ($5)—First, Gerald R. Duncan.

Single Comb Black Leghorn Cock, 5 entries ($2, $1, 75 cents, 50 cents) —First, Gerald R. Duncan on 41; second, Gerald R. Duncan on 39; third, Gerald R. Duncan on 37; fourth, Gerald R. Duncan on 76.

Single Comb Black Leghorn Cockerel, 7 entries ($2, $1, 75 cents, 50 cents) —First, Gerald R. Duncan on 41; second, Gerald R. Duncan on 26; third, Gerald R. Duncan on 40; fourth, H. C. Hunt on 12.

Single Comb Black Leghorn Hen, 5 entries ($2, $1, 75 cents, 50 cents) —First, Gerald R. Duncan on 47; second, Gerald R. Duncan on 48; third, Gerald R. Duncan on 49; fourth, Gerald R. Duncan on 50.

Single Comb Black Leghorn Pullet, 7 entries ($2, $1, 75 cents, 50 cents) —First, H. C. Hunt on 21; second, Gerald R. Duncan on 92; third, Gerald R. Duncan on 41; fourth, Gerald R. Duncan on 33.

Single Comb Black Minorca Cock, 2 entries ($2, $1)—First, Kelleys Poultry Farm on 1; second, Mrs. A. E. Peters on 11.

Single Comb Black Minorca Cockerel, 6 entries ($2, $1, 75 cents)—First, Kelleys Poultry Farm on 11; second, Kelleys Poultry Farm on 12; third, Kelleys Poultry Farm on 10.

Single Comb Black Minorca Hen, 8 entries ($2, $1, 75 cents, 50 cents)— First, Mrs. A. E. Peters on 13; second, Mrs. A. E. Peters on 68; third, Leora Leonard on 97; fourth, Leora Leonard on 9.

Single Comb Black Minorca Pullet, 3 entries ($2, $1)—First, Kelleys Poultry Farm on 16; second, Kelleys Poultry Farm on 17.

Single Comb Black Minorca Pen Fowls, 2 entries ($5)—First, Kelleys Poultry Farm.

Single Comb Black Minorca Pen Chicks, 2 entries ($5, $3)—First, Kelleys Poultry Farm; second, Leora Leonard.

Single Comb Buff Minorca Hen, 1 entry ($2)—First, Walter Russell on 37.

Single Comb Buff Minorca Pullet, 1 entry ($2)—First, Walter Russell on 46.

Single Comb White Minorca Cock, 3 entries ($2, $1, 75 cents)—First, Fred C. Hacke on 301; second, Fred C. Hacke on 303; third, Fred C. Hacke on 302.

Single Comb White Minorca Cockerel, 3 entries ($2, $1, 75 cents)—First, Fred C. Hacke on 305; second, Fred C. Hacke on 304; third, Fred C. Hacke on 306.

Single Comb White Minorca Hen, 3 entries ($2, $1, 75 cents)—First, Fred C. Hacke on 309; second, Fred C. Hacke on 307; third, Fred C. Hacke on 308.

Single Comb White Minorca Pullet, 3 entries ($2, $1, 75 cents)—First, Fred C. Hacke on 310; second, Fred C. Hacke on 311; third, Fred C. Hacke on 312.

Blue Andalusian Cockerel, 1 entry ($1)—First, Gerald R. Duncan on 93.

Blue Andalusian Pullet, 2 entries ($1)—First, Gerald R. Duncan.

Mottled Ancona (Single or Rose Comb) Cock, 1 entry ($2)—First, F. A. Davis on 15.

Mottled Ancona (Single or Rose Comb) Cockerel, 8 entries ($2, $1, 75 cents, 50 cents)—First, F. A. Davis on 10; second, R. Budatz on 3; third, E. A. Frauquemont on 61; fourth, D. D. Dailey on 35.

Mottled Ancona (Single or Rose Comb) Hen, 1 entry ($2)—First, Thomas Barron on 44.

Mottled Ancona (Single or Rose Comb) Pullet, 12 entries ($2, $1, 75 cents, 50 cents)—First, F. A. Davis on 4; second, F. A. Davis on 21; third, R. Budatz on 6; fourth, R. Budatz on 5.

Mottled Ancona (Single or Rose Comb) Pen Chicks, 3 entries ($5)—First, R. Budatz.

Campines (Silver) Cockerel, 3 entries ($2, $1, 75 cents)—First, C. A. Goss on 23; second, C. & C. T. Van Lint on 78; third, Pauline Fitzsimmons on 26.

Campines (Silver) Pullet, 4 entries ($2, $1, 75 cents)—First, C. A. Goss on 24; second, C. A. Goss on 25; third, C. & C. T. Van Lint on 64.

ENGLISH

Sweepstakes, Best Cockerel (Silver Loving Cup)—F. S. Jordan on Buff Orpington 09450.

Best Pullet (Silver Loving Cup)—Mrs. F. Happe on White Orpington 59.

EGG LAYING BODY CAPACITY TEST

Buff Orpington—First, Dr. H. E. Day & Son on 2360; second, Dr. H. E. Day & Son on 8; third, F. S. Jordon on 3767.

English, Other Than Buff Orpingtons—First, O. M. Brown on 21; second, G. M. Wormley on 55.

Speckled Sussex Hen, 1 entry ($2)—First, Ira Luse on 21.

Speckled Sussex Pullet, 2 entries ($2, $1)—First, George Beard on 27; second, Ira Luse on 5.

Single Comb Buff Orpington Cock, 18 entries ($3, $2, $1, $1)—First, F. S. Jordon on 09210; second, Dr. H. E. Day & Son on 3550; third, O. M. Brown on 12; fourth, Dr. H. E. Day & Son on 28.

Single Comb Buff Orpington Cockerel, 15 entries ($3, $2, $1, $1)—First, F. S. Jordon on 09450; second, F. S. Jordon on 09100; third, Wm. Herink on 58; fourth, F. S. Jordan on 09140.

Single Comb Buff Orpington Hen, 20 entries ($3, $2, $1, $1)—First, F. S. Jordon on 3767; second, O. M. Brown on 3; third, Sebert Doerder on 31; fourth, F. S. Jordon on 27.

Single Comb Buff Orpington Pullet, 13 entries ($3, $2, $1, $1)—First, F. S. Jordon on A. 5366; second, F. S. Jordon on A. 5364; third, F. S. Jordon on A. 5387; fourth, Roup & Son on 3.

Single Comb Buff Orpington Pen Fowls, 9 entries ($5, $3, $1)—First, Dr. H. E Day & Son; second, Dr. H. E. Day & Son; third, Roup & Son.

Single Comb Buff Orpington Pen Chicks, 5 entries ($5, $3, $1)—First, F. S. Jordon; second, Dr. H. E. Day & Son; third, Mrs. M. R. Hess.

Single Comb Black Orpington Cock, 1 entry ($3)—First, O. M. Brown on 11.

Single Comb Black Orpington Cockerel, 2 entries ($3, $2)—First, Ira Pfantz on 32; second, Ira Pfantz on 28.

Single Comb Black Orpington Hen, 1 entry ($3)—First, O. M. Brown on 21.

Single Comb Black Orpington Pullet, 1 entry ($3)—First, Ira Pfantz on 30.

Single Comb Black Orpington Pen Chicks, 1 entry ($5)—First, Ira Pfantz.

Single Comb White Orpington Cock, 3 entries ($3, $2)—First, G. M. Wormley on 30; second, G. M. Wormley on 26.

Single Comb White Orpington Cockerel, 12 entries ($3, $2, $1, $1)—First, Oscar Larson on 8; second, G. M. Wormley on 52; third, G. M. Wormley on 66; fourth, Theo. W. Happe on 28.

Single Comb White Orpington Hen, 7 entries ($3, $2, $1, $1)—First, Mrs. F. Happee on 99; second, G. M. Wormley on 81; third, G. M. Wormley on 55; fourth, F. M. Hayden on 2.

Single Comb White Orpington Pullet, 13 entries ($3, $2, $1, $1)—First, Mrs. F. Happe on 59; second, Mrs. F. Happe on 57; third, G. M. Wormley on 56; fourth, G. M. Wormley on 70.

Single Comb White Orpington Pen Fowls, 2 entries ($5)—First, G. M. Wormley.

Single Comb White Orpington Pen Chicks, 3 entries ($5, $3)—First, G. M. Wormley; second, Ardis Farley.

Single Comb Blue Orpington Cock, 1 entry ($1)—First, Ira Pfantz on 50.

Single Comb Blue Orpington Cockerel, 2 entries ($1, 50 cents)—First, Ira Pfantz on 33; second, Ira Pfantz on 36.

Single Comb Blue Orpington Hen, 1 entry (50 cents)—First, Ira Pfantz on 26.

Single Comb Blue Orpington Pullet, 4 entries ($1, 50 cents)—First, Ira Pfantz on 27; second, Ira Pfantz on 43.

Dark Cornish Cock, 3 entries ($2, $1, 75 cents)—First, Fred G. Reis. second, Geo. Beard on 28; third, Kermit Donnelly on 13.

Dark Cornish Cockerel, 6 entries ($2, $1, 75 cents)—First, Geo. Dickey on 119; second, Thomas Smollie on 1; third, Thomas Smollie on 2.

Dark Cornish Hen, 2 entries ($2, $1)—First, Fred G. Reis on 3; second, Geo. Beard on 29.

Dark Cornish Pullet, 8 entries ($2, $1, 75 cents)—First, Geo. Dickey on 102; second, Geo. Dickey on 101; third, Geo. Dickey on 104.

Dark Cornish Pen Fowls, 2 entries ($5)—First, Fred G. Reis.

Dark Cornish Pen Chicks, 2 entries ($5, $3)—First, Fred G. Reis; second, George Beard.

White Cornish Cock, 1 entry ($1)—First, Mrs. E. C. Graves on 1.

White Cornish Cockerel, 2 entries ($1, 50 cents)—First, Mrs. E. C. Graves on 3; second, Mrs. E. C. Graves on 2.

White Cornish Hen, 2 entries ($1, 50 cents)—First, Mrs. E. C. Graves on 4; second, Mrs. E. C. Graves on 5.

White Cornish Pullet, 2 entries ($1, 50 cents)—First, Mrs. E. C. Graves on 6; second, Mrs. E. C. Graves on 7.

DUTCH

Silver Spangled Hamburg Cock, 4 entries ($1, 50 cents)—First, Mrs. H. A. Tavlor on 17; second, H. M. & R. M. Jones on 16.

Silver Spangled Hamburg Cockerel, 3 entries ($1, 50 cents)—First, Mr. O. E. Brickner on 4; second, Mrs. H. A. Taylor on 18.

Silver Spangled Hamburg Hen, 6 entries ($1, 50 cents)—First, C. & C. T. Van Lint on 27; second, Mrs. H. A. Taylor on 20.

Silver Spangled Hamburg Pullet, 4 entries ($1, 50 cents)—First, O. E. Brickner on 5; second, O. E. Brickner on 6.

GAMES AND GAME BANTAMS

Black Breasted Red Game Bantam Cock, 4 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 20; second, C. & C. T. Van Lint on 8.

Black Breasted Red Game Bantam Cockerel, 5 entries ($1, 50 cents)—First, C. R. Prieast on 4; second, C. R. Prieast on 3.

Black Breasted Red Game Bantam Hen, 6 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 59; second, C. R. Prieast on 37.

Black Breasted Red Game Bantam Pullet, 6 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 24; second, H. M. & R. M. Jones on 23.

Silver Duckwing Game Bantam Hen, 1 entry (50 cents)—Second, C. & C. T. Van Lint on 75.

ORNAMENTAL BANTAMS

Golden Sebright Cock, 5 entries ($1, 50 cents)—First, F. L. Reinhard & Son on 82; second, F. L. Reinhard & Son on 92.

Golden Sebright Cockerel, 2 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 16; second, H. M. & R. M. Jones on 14.

Golden Sebright Hen, 6 entries ($1, 50 cents)—First, W. C. Runft on 1; second, F. L. Reinhard & Son on 79.

Golden Sebright Pullet, 4 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 37; second, H. M. & R. M. Jones on 25.

Black Rose Comb Cock, 1 entry ($1)—First, H. M. & R. M. Jones on 50.

Black Rose Comb Cockerel, 1 entry ($1)—First, H. M. & R. M. Jones on 64.

Black Rose Comb Hen, 2 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 58; second, H. M. & R. M. Jones on 13.

Black Rose Comb Pullet, 1 entry ($1)—First, H. M. & R. M. Jones on 65

Light Brahma Cock, 1 entry ($1)—First, H. M. & R. M. Jones on 18.

Light Brahma Cockerel, 1 entry ($1)—First, H. M. & R. M. Jones on 57.

Light Brahma Hen, 2 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 19; second, H. M. & R. M. Jones on 20.

Light Brahma Pullet, 2 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 22; second, H. M. & R. M. Jones on 21.

Buff Cochin Cock, 2 entries ($1, 50 cents)—First, F. L. Reinhard & Son on 59; second, H. M. & R. M. Jones on 23.

Buff Cochin Cockerel, 3 entries ($1, 50 cents)—First, F. L. Reinhard & Son on 67; second, H. M. & R. M. Jones on 60.

Buff Cochin Hen, 3 entries ($1, 50 cents)—First, H. M. & R. M. Jones on 24; second, F. L. Reinhard & Son.

White Cochin Cock, 2 entries ($1, 50 cents)—First, W. C. Runft on 626; second, W. C. Runft on 256.

White Cochin Cockerel, 2 entries ($1, 50 cents)—First, W. C. Runft on 673; second, W. C. Runft on 685.

White Cochin Hen, 4 entries ($1, 50 cents)—First, W. C. Runtf on 606; second, E. C. Runft on 645.

White Cochin Pullet, 3 entries ($1, 50 cents)—First, W. C. Runft on 615; second, C. & C. T. Van Lint on 13.

Black Cochin Cock, 3 entries ($1, 50 cents)—First, Gerald R. Duncan on 59; second, C. R. Prieast on 35.

Black Cochin Hen, 3 entries ($1, 50 cents)—First, C. R. Prieast on 30; second, C. R. Prieast on 47.

Black Tailed Japanese Cock, 1 entry ($1)—First, W. C. Runft on 601.

Black Tailed Japanese Cockerel, 2 entries ($1, 50 cents)—First, W. C. Runft on 63; second, W. C. Runft on 4.

Black Tailed Japanese Hen, 1 entry ($1)—First, W. C. Runft on 623.

Black Tailed Japanese Pullet, 2 entries ($1, 50 cents)—First, W. C. Runft on 31; second, W. C. Runft on 83.

Non-Bearded Polish Cockerel, 1 entry ($1)—First, C. & C. T. Van Lint on 1.

Non-Bearded Polish Pullet, 1 entry ($1)—First, C. & C. T. Van Lint on 19.

MISCELLANEOUS

White Silkie Cock, 3 entries ($1, 50 cents)—First, W. C. Runft on 29; second, W. C. Runft on 283.

White Silkie Cockerel, 6 entries ($1, 50 cents)—First, Jersey Ridge Poultry Farm on 97; second, Jersey Ridge Poultry Farm on 100.

White Silkie Hen, 3 entries ($1, 50 cents)—First, Gerald R. Duncan on 34; second, W. C. Runft on 916.

White Silkie Pullet, 6 entries ($1, 50 cents)—First, Jersey Ridge Poultry Farm on 51; second, Jersey Ridge Poultry Farm on 41.

CAPONS

American Capons, 4 entries ($3, $2, $1)—First, George Beard on 37; second, George Beard on 38; third, W. C. Runft on 79.

English Capons, 3 entries ($3, $2, $1)—First, George Beard on 41; second, George Beard on 40; third, George Beard on 42.

TURKEYS

White Holland Cock, 5 entries ($2, $1, 75 cents, 50 cents)—First, Mrs. Mary Wagner on 10; second, Mrs. Millard Thompson on 2; third, Mrs. Mary Wagner on 11; fourth, W. C. Runft on 452.

White Holland Cockerel, 2 entries ($2, $1)—First, Mrs. Millard Thompson on 4; second, W. C. Runft on 115.

White Holland Hen, 3 entries ($2, $1, 75 cents)—First, Mrs. Millard Thompson on 6; second, W. C. Runft on 219; third, Mrs. Mary Wagner on 12.

White Holland Pullet, 2 entries ($2, $1)—First, Mrs. Millard Thompson on 8; second, W. C. Runft on 158.

DUCKS

White Pekin Old Drake, 12 entries ($2, $1, 75 cents, 50 cents)—First, Chester L. Mason on 156; second, Jersey Ridge Poultry Farm on 50; third, Chester L. Mason on 168; fourth, Miss Flora B. Stephenson on 625.

White Pekin Young Drake, 14 entries ($2, $1, 75 cents, 50 cents)—First, Chester L. Mason on 173; second, Chester L. Mason on 161; third, H. E. Johnson on 5; fourth, W. C. Runft on 122.

White Pekin Old Duck, 14 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 591; second, Chester L. Mason on 157; third, Gerald R. Duncan on 43; fourth, Gerald R. Duncan on 45.

White Pekin Young Duck, 13 entries ($2, $1, 75 cents, 50 cents)—First, H. E. Johnson on 6; second, Chester L. Mason on 154; third, H. E. Johnson on 4; fourth, Jersey Ridge Poultry Farm on 12.

White Aylesbury Old Drake, 1 entry ($1)—First, W. C. Runft on 273.

White Aylesbury Young Drake, 2 entries ($1, 50 cents)—First, W. C. Runft on 288; second, W. C. Runft on 211.

White Aylesbury Old Duck, 2 entries ($1, 50 cents)—First, W. C. Runft on 564; second, W. C. Runft on 219.

White Aylesbury Young Duck, 3 entries ($1, 50 cents)—First, W. C. Runft on 254; second, W. C. Runft on 229.

Colored Rouen Old Drake, 8 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 565; second, W. C. Runft on 293; third, C. & C. T. Van Lint on 50; fourth, H. E. Johnson on 7.

Colored Rouen Young Drake, 9 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 224; second, Gerald R. Duncan on 113; third, Gerald R. Duncan on 114; fourth, Griffiths Bros. on 95.

Colored Rouen Old Duck, 7 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 225; second, W. C. Runft on 232; third, Griffiths Bros. on 94; fourth, H. E. Johnson on 8.

Colored Rouen Young Duck, 11 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 262; second, W. C. Runft on 218; third, Gerald R. Duncan on 13; fourth, H. E. Johnson on 9.

Black Cayuga Old Drake, 2 entries ($1)—First, W. C. Runft on 239.

Black Cayuga Old Duck, 2 entries ($1)—First, W. C. Runft on 17.

Gray Call Old Drake, 4 entries ($1, 50 cents)—First, Gerald R. Duncan on 471; second, W. C. Runft on 617.

Gray Call Young Drake ($1, 50 cents)—First, Gerald R. Duncan on 23; second, Gerald R. Duncan on 24.

Gray Call Old Duck, 4 entries ($1, 50 cents)—First, W. C. Runft on 695; second, Gerald R. Duncan on 25.

Gray Call Young Duck, 2 entries ($1)—First, Gerald R. Duncan on 28.

White Call Old Drake, 1 entry ($1)—First, W. C. Runft on 551.

White Call Young Drake, 1 entry ($1)—First, W. C. Runft on 629.

White Call Old Duck, 1 entry ($1)—First, W. C. Runft on 663.

White Call Young Duck, 1 entry ($1)—First, W. C. Runft on 643.

Black East India Old Drake, 1 entry ($1)—First, W. C. Runft on 622.

White Crested Young Drake, 1 entry ($1)—First, W. C. Runft on 203.

White Crested Young Duck, 2 entries ($1)—First, Gerald R. Duncan on 30.

Colored Muscovy Old Drake, 2 entries ($2, $1)—First, Gerald R. Duncan on 52; second, W. C. Runft on 495.

Colored Muscovy Young Drake, 2 entries ($2, $1)—First, Gerald R. Duncan on 53; second, Gerald R. Duncan on 54.

Colored Muscovy Old Duck, 5 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 199; second, Gerald R. Duncan on 55; third, Griffith Bros. on 88; fourth, Gerald R. Duncan on 56.

Colored Muscovy Young Duck, 2 entries ($2, $1)—First, Gerald R. Duncan on 56; second, Gerald R. Duncan on 57.

White Muscovy Old Drake, 5 entries ($2, $1, 75 cents)—First, W. C. Runft on 462; second, Gerald R. Duncan on 59; third, W. C. Runft on 5.

White Muscovy Young Drake, 4 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 246; second, Gerald R. Duncan on 61; third, W. C. Runft on 248; fourth, Gerald R. Duncan on 60.

White Muscovy Old Duck, 5 entries ($2, $1, 75 cents, 50 cents)—First, Gerald R. Duncan on 62; second, W. C. Runft on 44; third, W. C. Runft on 37; fourth, Gerald R. Duncan on 63.

White Muscovy Young Duck, 4 entries ($2, $1)—First, W. C. Runft on 226; second, Gerald R. Duncan on 65.

Buff Orpington Old Drake, 5 entries ($2, $1, 75 cents, 50 cents)—First, August Klepke & Son on 24; second, Gerald R. Duncan on 67; third, W. C. Runft on 286; fourth, W. C. Runft on 265.

Buff Orpington Young Drake, 4 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 267; second, W. C. Runft on 221; third, Gerald R. Duncan on 68; fourth, Gerald R. Duncan on 69.

Buff Orpington Old Duck, 6 entries ($2, $1, 75 cents, 50 cents)—First, August Klepke & Son; second, W. C. Runft on 587; third, W. C. Runft on 217; fourth, Gerald R. Duncan on 71.

Buff Orpington Young Duck, 4 entries ($2, $1, 75 cents, 50 cents)—First, W. C. Runft on 259; second, W. C. Runft on 228; third, Gerald R. Duncan on 73; fourth, Gerald R. Duncan on 72.

Fawn and White Indian Runner Old Drake, 3 entries ($2, $1, 75 cents)—First, F. L. Reinhard & Son on 433; second, Gerald R. Duncan on 74; third, Gerald R. Duncan on 75.

Fawn and White Indian Runner Young Drake, 1 entry ($2)—First, F. L. Reinhard & Son on 446.

Fawn and White Indian Runner Old Duck, 1 entry ($2)—First, F. L. Reinhard & Son on 436.

Fawn and White Indian Runner Young Duck, 2 entries ($2, $1)—First, Gerald R. Duncan on 476; second, F. L. Reinhard & Son on 438.

White Indian Runner Old Drake, 2 entries ($2, $1)—First, W. C. Runft on 300; second, F. W. Johnson on 95.

White Indian Runner Old Duck, 5 entries ($2, $1)—First, F. L. Reinhard & Son on 407; second, W. C. Runft on 537.

White Indian Runner Young Duck, 3 entries ($2)—First, F. L. Reinhard & Son on 439.

Blue Swedish Old Drake, 4 entries ($1, 50 cents)—First, Gerald R. Duncan on 77; second, W. C. Runft on 579.

Blue Swedish Young Drake, 4 entries ($1, 50 cents)—First, Gerald R. Duncan on 79; second, Gerald R. Duncan on 80.

Blue Swedish Old Duck, 4 entries ($1, 50 cents)—First, Gerald R. Duncan on 82; second, W. C. Runft on 251.

Blue Swedish Young Duck, 4 entries ($1, 50 cents)—First, W. C. Runft on 462; second, Gerald R. Duncan on 84.

GEESE

Gray Toulouse Old Gander, 6 entries ($3, $2, $1)—First, John Bruce on 3; second, W. C. Runft on 478; third, John Bruce on 1.

Gray Toulouse Young Gander, 4 entries ($3, $2, $1, $1)—First, Jersey Ridge Poultry Farm on 86; second, John Bruce on 5; third, Griffiths Bros. on 79; fourth, Griffiths Bros. on 87.

Gray Toulouse Old Goose, 8 entries ($3, $2, $1, $1)—First, John Bruce on 2; second, W. C. Runft on 459; third, W. C. Runft on 497; fourth, John Bruce on 4.

Gray Toulouse Young Goose, 4 entries ($3, $2, $1, $1)—First, Jersey Ridge Poultry Farm on 39; second, John Bruce; third, Griffiths Bros. on 81; fourth, Griffiths Bros. on 80.

White Embden Old Gander, 8 entries ($3, $2, $1, $1)—First, Chester L. Mason on 28; second, W. C. Runft on 499; third, Mrs. Verle Dunlap on 100; fourth, Mrs. Mary Wagner on 14.

White Embden Young Gander, 5 entries ($3, $2, $1, $1)—First, H. E. Johnson on 3; second, Chester L. Mason on 129; third, Mrs. O. C. Bierma on 84; fourth, W. C. Runft on 59.

White Embden Old Goose, 8 entries ($3, $2, $1, $1)—First, W. C. Runft on 492; second, Mrs. Mary Wagner on 15; third, Mrs. O. C. Bierma on 78; fourth, Mrs. Mary Wagner on 16.

White Embden Young Goose, 5 entries ($3, $2, $1, $1)—First, H. E. Johnson on 4; second, W. C. Runft on 188; third, Mrs. O. C. Bierma on 83; fourth, W. C. Runft on 138.

Gray African Old Gander, 3 entries ($2)—First, C. W. Runft on 453.

Gray African Young Gander, 3 entries ($2, $1, 75 cents)—First, W. C. Runft on 317; second, W. C. Runft on 487; third, Edmund Hanson on 48.

Gray African Old Goose, 3 entries ($2, $1)—First, W. C. Runft on 473; second, W. C. Runft on 323.

Gray African Young Goose, 3 entries ($2, $1, 75 cents)—First, W. C. Runft on 482; second, W. C. Runft on 489; third, Edmund Hanson on 6.

Brown Chinese Old Gander, 2 entries ($2, $1)—First, W. C. Runft on 460; second, Gerald R. Duncan on 65.

Brown Chinese Young Gander, 3 entries ($2, $1, 75 cents)—First, W. C. Runft on 573; second, W. C. Runft on 335; third, Gerald R. Duncan on 86.

Brown Chinese Old Goose, 2 entries ($2, $1)—First, Gerald R. Duncan on 87; second, W. C. Runft on 337.

Brown Chinese Young Goose, 3 entries ($2, $1, 75 cents)—First, W. C. Runft on 303; second, Gerald R. Duncan on 88; third, W. C. Runft on 555.

White Chinese Old Gander, 6 entries ($3, $2, $1)—First, M. B. Howe on 18; second, Gerald R. Duncan on 105; third, W. C. Runft on 466.

White Chinese Young Gander, 5 entries ($3)—First, Gerald R. Duncan on 89.

White Chinese Old Goose, 7 entries ($3, $2, $1, $1)—First, W. C. Runft on 479; second, W. C. Runft on 463; third, M. B. Howe on 11; fourth, Gerald R. Duncan on 91.

White Chinese Young Goose, 5 entries ($3)—First, Gerald R. Duncan on 92.

SPECIALS

Special prizes offered by the American Water Fowl Breeders' Association at the Iowa State Fair 1922.

JUDGE.................................O. GROW, Cedar Falls, Iowa.

White Pekin Old Drake—Champion Ribbon, Chester L. Mason.

White Pekin Young Duck—Champion Ribbon, H. E. Johnson.

Colored Rouen Old Drake—Champion Ribbon, W. C. Runft.

Colored Rouen Old Duck—Champion Ribbon, W. C. Runft.

Gray Call Old Drake—Champion Ribbon, Gerald R. Duncan.

Gray Call Old Duck—Champion Ribbon, W. C. Runft.

Colored Muscovy Old Drake—Champion Ribbon, Gerald R. Duncan.

Colored Muscovy Old Duck—Champion Ribbon, W. C. Runft.

White Muscovy Old Drake—Champion Ribbon, W. C. Runft.

White Muscovy Old Duck—Champion Ribbon, Gerald R. Duncan.

Buff Orpington Old Drake—Champion Ribbon, August Klepke & Son.

Buff Orpington Old Duck—Champion Ribbon, August Klepke & Son.

Fawn and White Indian Runner, Old Drake--Champion Ribbon, F. L. Reinhard & Son.

Fawn and White Indian Runner, Young Duck—Champion Ribbon, Gerald R. Duncan.

Blue Swedish Old Drake—Champion Ribbon, Gerald R. Duncan.

Blue Swedish Old Duck—Champion Ribbon, Gerald R. Duncan.

Gray Toulouse Old Gander—Champion Ribbon, John Bruce.

Gray Toulouse Old Goose—Champion Ribbon, John Bruce.

White Embden Old Gander—Champion Ribbon, Chester L. Mason.

White Embden Old Goose—Champion Ribbon, W. C. Runft.

Gray African Old Gander—Champion Ribbon, W. C. Runft.

Gray African Old Goose—Champion Ribbon, W. C. Runft.

Brown Chinese Old Gander—Champion Ribbon, W. C. Runft.

Brown Chinese Old Goose—Champion Ribbon, Gerald R. Duncan.

White Chinese Old Gander—Champion Ribbon, M. B. Howe.

White Chinese Old Goose—Champion Ribbon, W. C. Runft.

PIGEON DEPARTMENT

JUDGE.............................E. C. BRANCH, Lees Summit, Mo.

EXHIBITORS—H. A. Anderson, 208 S. 2nd St., Keokuk; John J. Anthony & Son, Sac City; John R. Brosowske, 9138 Portland St., Detroit, Mich.; Walter Case, 804 Bluff St., Sioux City; Francis Clancey, 2708 Beaver Ave., Des Moines; Lester Dorn, 418 Foster Ave., Rockford, Ill.; C. H. Doty, Center Point; A. J. Dunlavey, 928 S. D St., Oskaloosa; O. R. Franz, Sioux City; Mrs. Mary E. Hurd, East Aurora, New York; Kangetter, Charleston, S. Carolina; Ed. Rosendall, R. No. 4, Grand Rapids, Mich.; E. J. Riley, Carroll; W. C. Rowlands, Alta; Harry A. Stone, 25 W. Washington, Indianapolis, Ind.; Sunny Side Squab Farm, Scranton.

Registered Swiss Mondaine Old Cock, 24 entries ($2, $1, 50 cents, Ribbon, Ribbon)—First, Sunny Side Squab Farm on No. 8; second, Ed. Rosendall on 9690-1921; third, Sunny Side Squab Farm on 22 Red; fourth, O. R. Franz on Z 13664; fifth, William C. Rowlands on 24140.

Registered Swiss Mondaine Old Hen, 24 entries ($2, $1, 50 cents, Ribbon, Ribbon)—First, John Anthony & Son on Z 9402; second, W. C. Rowlands on 19110; third, W. C. Rowlands on 9582; fourth, Sunny Side Squab Farm on 17 white; fifth, Sunny Side Squab Farm on 14.

Registered Swiss Mondaine 1922 Cock, 23 entries ($2, $1, 50 cents, Ribbon, Ribbon)—First, O. R. Franz on D 1054; second, O. R. Franz on D 1062; third, John Anthony & Son on 12614; fourth, W. C. Rowlands on 15622; fifth, Sunny Side Squab Farm on D 5555 N. P. A.

Registered Swiss Mondaine 1922 Hen, 19 entries ($2, $1, 50 cents, Ribbon, Ribbon)—First, John Anthony & Son on 12612; second, W. C. Rowlands on 1291; third, W. C. Rowlands on 15675; fourth, Sunny Side Squab Farm on D 11865 N. P. A.; fifth, John Anthony & Son on 12619.

Registered Swiss Mondaine Old Pair, 27 entries ($2, $1, 50 cents, Ribbon, Ribbon)—First, W. C. Rowlands on 19110 and 24141; second, John Anthony & Son on 20844 and 39402; third, Sunny Side Squab Farm; fourth, Sunny Side Squab Farm; fifth, Sunny Side Squab Farm.

Registered Swiss Mondaine Young Pair, 27 entries ($2, $1, 50 cents, Ribbon, Ribbon)—First, John Anthony & Son; second, John Anthony & Son; third, Walter Case; fourth, Sunny Side Squab Farm; fifth, Sunny Side Squab Farm.

Registered Swiss Mondaine Get of Pair, 5 entries ($3, $2, $1, Ribbon. Ribbon)—First, Sunny Side Squab Farm; second, John Anthony & Son; third, W. C. Rowland; fourth, Sunny Side Squab Farm; fifth, A. J. Dunlevy.

Registered Swiss Mondaine Pen, 3 entries ($5, $3, $1)—First, Sunny Side Squab Farm; second, John Anthony & Son; third, Sunny Side Squab Farm.

Carneaux Old Cock, 6 entries ($2, $1, 50 cents, Ribbon, Ribbon)—First, H. A. Anderson on 14182; second, Harry A. Stone on 2288; third, H. A. Anderson on 1751; fourth, Harry A. Stone on 6533; fifth, Sunny Side Squab Farm on 33.

Carneaux Old Hen, 6 entries ($2, $1, 50 cents)—First, H. A. Anderson on 60; second, Sunny Side Squab Farm on 41; third, Harry A. Stone on 2251; fourth, Harry A. Stone on 5052; fifth, H. A. Anderson on A. P. C. 14175.

Carneaux 1922 Cock, 3 entries ($2, $1, 50 cents)—First, H. A. Anderson on N. P. A. 5371; second, Harry A. Stone on 505; third, Sunny Side Squab Farm on 544.

Carneaux 1922 Hen, 4 entries ($2, $1, 50 cents)—First, H. A. Anderson on N. P. A. 5352; second, Harry A. Stone on 531; third, Sunny Side Squab Farm on 511.

Fantail Old Cock, 1 entry ($2)—First, Harry A. Stone on 18080.

Fantail Old Hen, 1 entry ($2)—First, Harry A. Stone on 4873.

Fantail 1922 Cock, 1 entry ($2)—First, Harry A. Stone on 60.

Fantail 1922 Hen, 1 entry ($2)—First Harry A. Stone on 52.

Homer Old Cock, 2 entries ($2)—First, Sunny Side Squab Farm on 14.

Homer Old Hen, 2 entries ($2)—First, Sunny Side Squab Farms on 14.

Homer 1922 Cock, 1 entry ($2)—First, Harry A. Stone on 9594.

Homer 1922 Hen, 1 entry ($2)—First, Harry A. Stone on 546.

SPECIALS

Iowa State Fair Grand Sweepstakes Best Display, Any Variety (by points) (Silver Loving Cup)—First, Sunny Side Squab Farm.

SWISS MONDAINE PIGEON RECORD ASSOCIATION

For Grand Champion Cock and Hen—First, Champion Cock, Sunny Side Squab Farm on 8.

Champion Hen—John Anthony & Son on Z 9402.

Offered by Iowa Registered Swiss Mondaine Pigeon Booster Club.

Best Registered Swiss Mondaine (Silver Loving Cup)—First, Sunny Side Squab Farm.

Best Mated Pair, Registered Swiss Mondaine (Silver Loving Cup)—First, William C. Rowlands.

Best Get of Pair, Registered Swiss Mondaine (Silver Loving Cup)—First, Sunny Side Squab Farm.

Highest Prize Won by Mondaine Exhibitor Winning for First Time (Silver Loving Cup)—First, John Anthony & Son.

RABBIT DEPARTMENT

JUDGE............................FRANK HARRIS, Des Moines, Iowa.

EXHIBITORS—J. M. Allen, 1557 27th, Des Moines; G. R. and Ida M. Dickman, 1509 Harrison, Des Moines; G. I. Jones, 1417 21st St., Des Moines; Russell Lundgren, 413 S. E. 5th St., Des Moines; J. B. Manning, Waukee; M. C. Runft, Reinbeck.

American Blues Senior Buck, 3 entries ($2, $1, 50 cents, 75 cents)—First, G. J. Jones on C-1; second, G. J. Jones on 15821; third, G. J. Jones on B-1.

American Blues Senior Doe, 3 entries ($2, $1, 50 cents, 75 cents)—First, G. J. Jones; second, G. J. Jones; third, G. J. Jones.

Angoras Senior Buck, 2 entries ($2, $1, $1.50)—First, W. C. Runft on 1; second, J. B. Manning.

Angoras Senior Doe, 3 entries ($2, $1.50)—First, J. B. Manning; second, W. C. Runft.

Angoras Junior Buck, 2 entries ($2, $1.50)—First, W. C. Runft on 4; second, W. C. Runft on 5.

Angoras Junior Doe, 2 entries ($2, $1.50)—First, W. C. Runft on 6; second, W. C. Runft on 7.

Dark Steel Gray-Flemish Giant, Senior Buck, 1 entry ($2)—First, C. R. Prieast on 7.

Dark Steel Gray-Flemish Giant, Senior Doe, 1 entry ($2)—First, J. M. Allen on 7.

Dark Steel Gray-Flemish Giant, Junior Doe, 1 entry ($2)—First, J. M. Allen.

Gray-Flemish Giant, Senior Buck, 2 entries ($2, $1.50)—First, J. M. Allen; second, J. B. Manning.

Gray-Flemish Giant, Senior Doe, 3 entries ($2, $1.50, 75 cents)—First, J. M. Allen; second, J. B. Manning; third, J. B. Manning.

White-Flemish Giant, Senior Doe, 2 entries ($2)—First, C. R. Prieast on 11.

Himalayans Senior Buck, 2 entries ($2, $1.50)—First, Russell Lundgren on 2-L; second, Russell Lundgren on 1-L.

Himalayans Senior Doe, 1 entry ($2)—First, Russell Lundgren on 4-L.

Himalayans Junior Buck, 1 entry ($2)—First, Russell Lundgren on 3-C.

New Zealand Red Senior Buck, 3 entries ($2, $1.50, 75 cents)—First, G. R. & Ida M. Dickman on 59103; second, G. J. Jones on 14588; third, G. R. & Ida M. Dickman on Z 486.

New Zealand Red Senior Doe, 8 entries ($2, $1.50, 75 cents, 50 cents, 50 cents)—First, G. R. & Ida M. Dickman on Z 485; second, G. R. & Ida M. Dickman on Z-487; third, J. M. Allen; fourth, G. R. & Ida M. Dickman on 24; fifth, G. R. & Ida M. Dickman on 25.

New Zealand Red Junior Buck, 4 entries ($2, $1.50, 75 cents, 50 cents)—First, J. M. Allen; second, J. M. Allen; third, J. M. Allen; fourth, G. R. & Ida M. Dickman on 22.

New Zealand Red Junior Doe, 18 entries ($2, $1.50, 75 cents, 50 cents, 50 cents)—First, G. R. & Ida M. Dickman on 12; second, G. R. & Ida M. Dickman on 15; third, G. R. & Ida M. Dickman on 10; fourth, J. M. Allen; fifth, J. M. Allen.

BOYS' AND GIRLS' POULTRY DEPARTMENT

JUDGE..L. E. HEIFNER.

EXHIBITORS—Neal Arnold, Adel; Marion Allen, 2311 S. Cypress St., Sioux City; Eugene Allen, 2311 S. Cypress, Sioux City; Jack Allen, 457 West St., Sioux City; Dorothy Anderson, R. No. 2, Box 14, Sergeant Bluff; David Beck, Corning; Lura G. Beath, Corning; Lawrence Beck, Corning; Ivan Beck, Corning; Thomas Barrow, Carroll; Ross C. Bunch, Keokuk; C. Bender, 2309 S. Clinton, Sioux City; Donald Burton, Des Moines; Dorothy Blinn, Glidden; Dale W. Beck, Ottumwa; Alice M. Beck, Ottumwa; Ryland Crary, Liberty Center; Fern Cooper, Corning; Berneice Cooper, Corning; Wells Calbreath, 527 S. 15th St., Keokuk; Jas. Cameron, 911 Grand Ave., Keokuk; Goldie Cohn, 1210 17th St., Sioux City; Bonnie Chaffer, Des Moines; Ruby Carlisle, Ottumwa; Wilbur Dingwell, Adel; Kermit Donnelly, Ottumwa; Minnil Dorr, Baxter; Alice Earl, Sioux City; Alice Everts, Glidden; Wellington Ewalt, Liscomb; B. Jennings Ebersole, 1549 Hull Ave., Des Moines; Elder Edmund, Ottumwa; Leonard Filorski, 2203 Villa Ave., Sioux City; John Fushs, Danbury; Pauline Fitzsimmons, Ottumwa; Ruth Gibson, 2801 Hickman, Des Moines; Robert Gibson, 2801 Hickman, Des Moines; Harold Gallagher, 222 S. 2nd, Keokuk; Spencer Green, 2600 Rebecca St., Sioux City; Lester Harden, Corning; Agnes Henderson, Nodaway; Edna Hollis, Hudson; Inez Hutcherson, Hilton Road, Keokuk; Veta Hutcherson, Hilton Road, Keokuk; Gladys Hill, 905 Blondean, Keokuk; Geo. Henry, 210 Cook St., Sioux City; Willard Habnick, Leeds Sta., Sioux City; Wayne Hoyt, 2600 S. Cypress, Sioux City; Hazel Hall, 345 Hull Ave., Des Moines; Harold Hawk, Liscomb; Julian Hockenbury, Grinnell; James Huffman, Ottumwa; Byron Hines, Ottumwa; W. L. & W. R. Keil, Ft. Madison; Raymond Klocke, Templeton; Levern Koehler, Liscomb; Ralph Kirkland, Ottumwa; Maxine Locker, 44th and Urbandale, Des Moines; Arnold Loeschen, Glidden; Clifford Lathrop, 217 Kenyon Ave., Ottumwa; Glen LeFever, Liscomb; Welard LeFever, Liscomb; Voss McKibben, Liscomb; Clarence Morrison, Indianola; Alice Morris, R. No. 3, Box 131, Sioux City; Herman Muller, Coon Rapids; Millard Mabis, Ottumwa; Winifred Martin, Monroe; Leona O'Leary, 215 Allen St., Sioux City; Inez Osborne, 1601 W. 29th, Sioux City; Deane G. Pendarvis, Keosauqua; Romayne Porter, Ames; Dennie Rockefeller, 1618 Carroll, Keokuk; Clara Anna Reid, 3225 Morningside, Sioux City; Uryilla Reinhold, 2801 Riverside Ave., Sioux City; Helen Reid, 3225 Morningside, Sioux City; Cecil Rogers, 1515 Isabella St., Sioux City; Charles Reimann, Jefferson; Loyd Snugg, Liberty Center; Frank Smith, R. No. 3, Box 215, Sioux City; Lawrence Strohbeen, 2422 W. 7th St., Sioux City; Lilburn Staman, 3201 E. 2d St., Sioux City; Henry Scott, 2412 Patterson, Sioux City; Opal Small, 4725 Central Ave., Sioux City; Inez Seeman, 2105 S. Lemon, Sioux City; Evelyn Schroeder, Arcadia; Charles Striver, Ottumwa; Robert Scott, Ottumwa; Herman Swanson, Ottumwa;

Carl Schmitz, Ottumwa; Orville Tompson, Jefferson; Carlton Tucker, Liscomb; Edward Unruh, 918 Pacific, Sioux City; Edwin Vavra, R. No. 3, Cedar Rapids; John Van Slyke, Liscomb; Lambert Winnike, Carroll; Leo Winnike, Carroll; Robert Walley, 20th & Grand, Keokuk; Geo. Wheelock, 820 Missouri St., Sioux City; Wm. Walker, Manning; Geo. Wagner, Ottumwa.

Grand Sweepstakes, Best Cockerel (Ribbon)—First, Billy Williams on 59.

Best Pullet (Ribbon)—First, Robt. Walley, Jr. on 81.

SWEEPSTAKES, AMERICAN CLASS

Best Cockerel ($5)—First, Billy Williams on 59.

Best Pullet ($5)—First, Robt. Gibson on 66.

Barred Plymouth Rock (Light) Cockerel, 8 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Charles Reimann on 97; second, Charles Reimann on 98; third, Charles Reimann on 99; fourth, James Cameron on 77; fifth, James Cameron on 76.

Barred Plymouth Rock (Light) Pullet, 4 entries ($2, $1, 75 cents)—First, Charles Reimann on 94; second, Charles Reimann on 96; third, Charles Reimann on 95.

Barred Plymouth Rock (Light) Pen, 5 entries ($4, $2, $1)—First, Charles Reimann; second, Lambert Winnicke; third, Dennis Rockefeller.

Barred Plymouth Rock (Dark) Cockerel, 3 entries ($2, $1, 75 cents)—First, Charles Reimann on 105; second, Lura G. Beath on 8; third, Faye Blakey on 41.

Barred Plymouth Rock (Dark) Pullet, 3 entries ($2, $1, 75 cents)—First, Lura G. Beath on 7; second, Charles Reimann on 102; third, Faye Blakey on 78.

Barred Plymouth Rock (Dark) Pen, 4 entries ($4, $2, $1, $1)—First, Charles Reimann; second, Leo Winnicke; third, Lura G. Beath; fourth, Edwin Vavra.

Buff Plymouth Rock Cockerel, 5 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Kermit Donnelly on 36; second, Kermit Donnelly on 2; third, Francis Krause on 20; fourth, Garnet Krause on 19; fifth, Jack Allen on 50.

Buff Plymouth Rock Pullet, 5 entries ($2, $1, 75 cents, 50 cents, 25 cents) —First, Kermit Donnelly on 69; second, Kermit Donnelly on 55; third, Jack Allen on 49; fourth, Francis Krause on 31; fifth, Garnet Krause on 23.

Buff Plymouth Rock Pen, 4 entries ($4, $2, $1)—First, Kermit Donnelly; second, Jack Allen; third, Marvin Stark.

White Plymouth Rock Cockerel, 5 entries ($2, $1, 75 cents, 50 cents)—First, Opal Small on 32; second, Ivan Beck on 69; third, Carl Schmitz on 49; fourth, Willard Habnick on 1.

White Plymouth Rock Pullet, 5 entries ($2, $1, 75 cents)—First, Carl Schmitz on 92; second, Ivan Beck on 78; third, Willard Habnick on 2.

White Plymouth Rock Pen, 7 entries ($4, $2, $1, $1)—First, Billy Williams; second, Opal Small; third, Arnold Loeschen; fourth, Carl Schmitz.

Buff Wyandotte Cockerel, 3 entries ($2, $1, 75 cents)—First, Clara Anna Reid on 20; second, Geo. Wagner on 47; third, Geo. Wagner on 42.

Buff Wyandotte Pullet, 3 entries ($2, $1)—First, Geo. Wagner on 49; second, Clara Anna Reid on 21.

Buff Wyandotte Pen, 3 entries ($4, $2, $1)—First, Geo. Wagner; second, Clara Anna Reid; third, Geo. Wagner.

Golden Laced Wyandotte Cockerel, 4 entries ($2, $1, 75 cents, 50 cents) —First, Iney Seeman on 17; second, Verne Cooper on 13; third, Verne Cooper on 11; fourth, W. L. & W. R. Kiel on 9.

Golden Laced Wyandotte Pullet, 5 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, W. L. & W. R. Kiel on 6; second, Verne Cooper on 12; third

Verne Cooper on 14; fourth, Iney Seeman on 59; fifth, W. L. & W. R. Kiel on 7.

Partridge Wyandotte Cockerel, 1 entry ($2)—First, Iney Osborne on 51.

Partridge Wyandotte Pullet, 1 entry ($2)—First, Iney Osborne on 13.

Partridge Wyandotte Pen, 1 entry ($4)—First, Iney Osborne.

Silver Laced Wyandotte Cockerel, 1 entry ($2)—First, Lloyd Snugg on 5.

Silver Laced Wyandotte Pullet, 1 entry ($2)—First, Clarence Morrison on 6.

Silver Laced Wyandotte Pen, 2 entries ($4, $2)—First, Ryland Crary; second, Valda Goodale.

White Wyandotte Cockerel, 10 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Dorothy Anderson on 10; second, Winifred Martin on 51; third, Robert Gibson on 50; fourth, Robert Gibson on 65; fifth, Clara Anna Reid on 12.

White Wyandotte Pullet, 12 entries ($2, $1, 75 cents, 50 cents, 25 cents) —First, Robert Gibson on 56 and 66; second, Dorothy Anderson on 3; third Winifred Martin on 52; fourth, B. Jennings Ebersole on 15; fifth, Julian Hockenbury on 15.

White Wyandotte Pen, 10 entries ($4, $2, $1, $1)—First, Dorothy Anderson; second, B. Jennings Ebersole; third, Winifred Martin; fourth, Dale Beck; fifth, Raymond Klocke.

Rose Comb Rhode Island Red Cockerel, 3 entries ($2)—First, Lawrence Beck on 34.

Single Comb Rhode Island Red Cockerel, 12 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Maxine Locker on 63; second, Herman Swanson on 26; third, Edward Unruh on 88; fourth, Clifford Lathrop on 99; fifth, Herman Swanson on 34.

Single Comb Rhode Island Red Pullet, 11 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Herman Swanson on 35; second, Edward Unruh on 87; third, Herman Swanson on 27; fourth, Dean Pendarvis on 251; fifth, Bonnie Chaffee on 20.

Single Comb Rhode Island Red Pen, 8 entries ($4, $2, $1, $1, $1)—First, Herman Swanson; second, Maxine Locker; third, Bonnie Chaffee; fourth, Clifford Lathrop; fifth, Edward Unruh.

ASIATIC CLASS

Sweepstakes, Best Cockerel ($5)—First, Leslie Hardin on 51.

Best Pullet ($5)—First, Alice Everts on 139.

Light Brahma Cockerel, 2 entries ($2)—First, Berneice Cooper on 1.

Light Brahma Pullet, 5 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Leslie Hardin on 92; second, Harold Gallagher on 61; third, Goldie Cohn on 85; fourth, Goldie Cohn on 82; fifth, Berneice Cooper on 2.

Light Brahma Pen, 4 entries ($4, $2, $1, $1)—First, Leslie Hardin; second, Berneice Cooper; third, Goldie Cohn; fourth, Harold Gallagher.

Black Langshan Cockerel, 3 entries ($2, $1, 75 cents)—First, Marion Allen on 22; second, Agnes Hendrickson on 18; third, Charles Shriver on 73.

Black Langshan Pullet, 3 entries ($2, $1, 75 cents)—First, Marion Allen on 15; second, Agnes Hendrickson on 19; third, Charles Shriver on 10.

Black Langshan Pen, 6 entries ($4, $2, $1, $1, $1)—First, Alice Everts; second, George Henry; third, Marion Allen; fourth, Agnes Hendrickson; fifth, Charles Shriver.

MEDITERRANEAN CLASS

Sweepstakes, Best Cockerel ($5)—First, Mildred Stark on 45.

Best Pullet ($5)—First, Robt. Walley on 81.

Dark Brown Leghorn (Either Comb) Cockerel, 2 entries ($2, $1)—First, Alice Beck on 60; second, Alice Beck on 39.

Dark Brown Leghorn (Either Comb) Pullet, 2 entries ($2, $1)—First, Pauline Fitzsimmons on 91; second, Alice Beck on 6.

Dark Brown Leghorn (Either Comb) Pen, 2 entries($4, $2)—First, Alice Beck; second, Pauline Fitzsimmons.

Light Brown Leghorn (Either Comb) Pen, 1 entry ($4)—First, Hazel Hall.

Buff Leghorn (Either Comb) Cockerel, 3 entries ($2, $1)—First, Millard Mabis on 25; second, Inez Hutcherson on 86.

Buff Leghorn (Either Comb) Pullet, 2 entries ($2, $1)—First, Inez Hutcherson on 85; second, Millard Mabis on 41.

White Leghorn (Either Comb) Cockerel, 7 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Mildred Stark on 45; second, Robert Walley on 80; third, Lawrence Strohbeen on 11; fourth, Spencer Green on 22; fifth, Eugene Allen on 75.

White Leghorn (Either Comb) Pullet, 8 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Robert Walley on 81; second, Pauline Fitzsimmons on 48; third, Lawrence Strohbeen on 3; fourth, Mildred Stark on 63; fifth, Eugene Allen on 58.

White Leghorn (Either Comb) Pen, 8 entries ($4, $2, $1, $1, $1)—First, Robt. Walley; second, Mildred Stark; third, Eugene Allen; fourth, Spencer Green; fifth, Lawrence Strohbeen.

Black Minorca (Either Comb) Cockerel, 4 entries ($2, $1, 75 cents, 50 cents)—First, Helen Reid on 2; second, James Huffman on 40; third, James Huffman on 11; fourth, George Wheelock on 41.

Black Minorca (Either Comb) Pullet, 4 entries ($2, $1, 75 cents, 50 cents) —First, Helen Reid on 3; second, James Huffman on 7; third, James Huffman on 46; fourth, George Wheelock on 50.

Black Minorca (Either Comb) Pen, 5 entries ($4, $2, $1, $1, $1)—First, Dorothy Blinn; second, Helen Reid; third, James Huffman; fourth, James Huffman; fifth, Geo. Wheelock.

Mottled Ancona (Either Comb) Cockerel, 3 entries ($2, $1)—First, Ralph Kirkland on 85; second, Ruth Young on 31.

Mottled Ancona (Either Comb) Pullet, 5 entries ($2, $1, 75 cents, 50 cents)—First, Pauline Fitsimones on 54; second, Neal Arnold on 1; third, Ralph Kirkland on 71; fourth, Ruth Young on 34.

Mottled Ancona (Either Comb) Pen, 6 entries ($4, $2, $1, $1, $1)—First, Neal Arnold; second, Thomas Barron; third, Pauline Fitsimones; fourth, Ralph Kirkland; fifth, Ruth Young.

ENGLISH CLASS

Sweepstakes, Best Cockerel, English Class ($5)—John Fushs Jr.

Best Pullet ($5)—First, John Fushs Jr. on 19.

Buff Orpington (Single Comb) Cockerel, 5 entries ($2, $1, 75 cents)—First, Alice Morris on 1; second, Ruby Carlisle on 1; third, Elder Edmund on 24.

Buff Orpington (Single Comb) Pullet, 10 entries ($2, $1, 75 cents, 50 cents, 25 cents)—First, Elder Edmund on 17; second, Ross C. Bunch on 70; third, Ruby Carlisle on 10; fourth, Alice Morris on 2; fifth, Elder Edmund on 23.

Buff Orpington (Single Comb) Pen, 8 entries ($4, $2, $1, $1, $1)—First, Herman Mueller; second, Wells Calbreath; third, Ross C. Bunch; fourth, Alice Morris; fifth, Elder Edmund.

White Orpington (Single Comb) Cockerel, 5 entries ($2, $1, 75 cents, 50 cents)—First, Floy Brewer on 91; second, Evelyn Schroeder on 6; third, Alice Earl on 1; fourth, Ruby Carlisle on 31.

White Orpington (Single Comb) Pullet, 5 entries ($2, $1, 75 cents, 50 cents)—First, Evelyn Schroeder on 40; second, Alice Earl on 2; third, Floy Brewer on 12; fourth, Ruby Carlisle on 36.

White Orpington (Single Comb) Pen, 8 entries ($4, $2, $1, $1, $1)—First John Fushs Jr.; second, Wm. Walker; third, Orville Tompson; fourth, Floy Brewer; fifth, Alice Earl.

Dark Cornish Pen, 1 entry ($4)—First, Frank Smith.

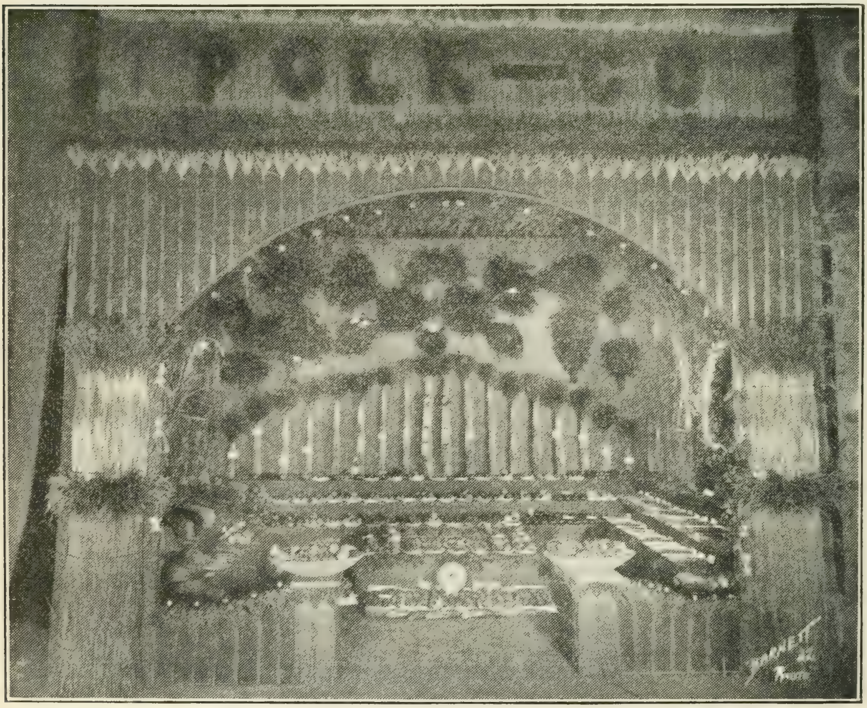
AGRICULTURAL DEPARTMENT

SUPERINTENDENT........................H. O. WEAVER, Wapello, Iowa.
JUDGE....................................P. C. TAFF, Ames, Iowa.

FIELD CORN
NORTHERN DISTRICT

Ten Ears Yellow ($15, $10, $8, $6, $4, $2)—First, C. H. Arthur, Spirit Lake; second, Wm. Green, Gruver; third, Ed. R. Mowdsley, Irvington; fourth, Rome Robison, Irvington; fifth, Isaac Johnson, West Union; sixth, Arthur L. Look, Luverne.

Ten Ears White ($15, $10, $8, $6, $4, $2)—First, A. B. Schenck, Algona; second, Theo. Gonna, Waterville; third, Ed. R. Mowdsley, Irvington; fourth, C. H. Arthur, Spirit Lake; fifth, R. B. Brown, Inwood; sixth, Isaac Johnson, West Union.



Polk County Exhibit Which Won Sweepstakes at 1922 Iowa State Fair.

Single Ear Yellow ($10, $8, $5, $3, $2)—First, Ed. R. Mowdsley, Irvington; second, C. H. Arthur, Spirit Lake; third, Rome Robison, Irvington; fourth, Arthur L. Look, Luverne; fifth, Rome Robison, Irvington.

Single Ear White ($10, $8, $5, $3, $2)—First, Ed. R. Mowdsley, Irvington; second, A. B. Schenck, Algona; third, Theo. Gonna, Waterville; fourth, Isaac Johnson, West Union; fifth, C. H. Arthur, Spirit Lake.

NORTH CENTRAL DISTRICT

Ten Ears Yellow ($15, $12, $10, $8, $6, $4, $3, $1)—First, E. B. Glenney, Union; second, Victor E. Gustafson, Harcourt; third, W. J. Irving, Blairsburg; fourth, J. R. Silver, Webster City; fifth, Axel Anderson, Paton; sixth, Fred G. Pinn, Humboldt; seventh, Albert Anderson, Harcourt; eighth, L. Emanuel Peterson, Harcourt.

Ten Ears White ($15, $12, $10, $8, $6, $4)—First, L. Emanuel Peterson, Harcourt; second, W. J. Irving, Blairsburg; third, Victor E. Gustafson, Harcourt; fourth, Fred G. Pinn, Humboldt; fifth, A. E. Johnson, Laurens; sixth, P. M. Peterson, Cherokee.

Single Ear Yellow ($12, $10, $8, $5, $3, $2)—First, L. Emanuel Peterson, Harcourt; second, E. B. Glenney, Union; third, Axel Anderson, Paton; fourth, Jesse Bige, Cedar Falls; fifth, A. E. Johnson, Laurens; sixth. Emory R. Gustafson, Lanyon.

Single Ear White ($12, $10, $8, $5, $3, $2)—First, Victor E. Gustafson, Harcourt; second, S. Emanuel Peterson, Harcourt; third, W. J. Irving, Blairsburg; fourth, A. E. Johnson, Laurens; fifth, P. M. Peterson, Cherokee; sixth, Fred G. Pinn, Humboldt.

SOUTH CENTRAL DISTRICT

Ten Ears Yellow ($20, $18, $15, $12, $10, $8, $6, $3, $2, $2)—First, S. L. Farlow, Ankeny; second, I. E. Proudfit, Altoona; third, Marion Coppock, Ankeny; fourth, C. G. Seiberling, Mitchellville; fifth, E. C. Hiatt, Mitchellville; sixth, Will Steenwyck, Mitchellville; seventh, J. L. Taylor, Mitchellville; eighth, Leland Taylor, Mitchellville; ninth, E. L. Pearson, Mitchellville; tenth, John Justice, Ankeny.

Ten Ears White ($18, $15, $10, $8, $6, $4, $2, $2, $2, $2)—First, Willard Zeller, Jefferson; second, John Justice, Ankeny; third, W. F. Otcheck, Altoona; fourth, Earle Knapp, Guthrie Center; fifth, Wm. Danner, Dallas Center; sixth, Paul Kern, Minburn; seventh, La Verne Spencer, Audubon; eighth, Frank Justice, Berwick; ninth, Laren B. Bentall, Adel; tenth, W. O. Knapp, Guthrie Center.

Single Ear Yellow ($15, $12, $10, $8, $5, $3, $2, $2, $1, $1)—First, Noel Tucker, Mitchellville; second, Matt Baker, Mitchellville; third, Leland Taylor, Mitchellville; fourth, A. Rock Meints, Dixon; fifth, C. G. Seiberling, Mitchellville; sixth, C. E. Hiatt, Mitchellville; seventh, S. L. Farlow, Ankeny; eighth, J. L. Taylor, Mitchellville; ninth, H. A. Dippold, Altoona; tenth, E. F. Golcke, State Center.

Single Ear White ($12, $10, $8, $6, $5, $3, $2, $1)—First, John Justice, Ankeny; second, Earl Knapp, Guthrie Center; third, Matt Baker, Mitchellville; fourth, La Verne Spencer, Audubon; fifth, Frank Justice, Berwick; sixth, Millard Zeller, Jefferson; seventh, W. O. Knapp, Guthrie Center; eighth, Paul Kern, Minburn.

SOUTHERN DISTRICT

Ten Ears Yellow ($20, $18, $15, $12, $10, $8, $6, $3, $2, $2)—First, N. H. Krizer, Rose Hill; second, Ray Redfern, Yarmouth; third, Bruce Hanna, Lacy; fourth, Mack Utterback, Sigourney; fifth, Krizer Bros., Eddyville; sixth, J. A. Mason, Carlisle; seventh, Erma Hunt, Carlisle; eighth, S. Flemming, Stuart; ninth, Miss Bertha Baily, Ottumwa; tenth, Ellsworth Bailey, Ottumwa.

Ten Ears White ($18, $15, $10, $8, $6, $4, $2, $2, $1, $1)—First, Ellsworth Baily, Ottumwa; second, Harry Hilton, Malvern; third, Mack Utterback, Sigourney; fourth, Frank Hilton, Malvern; fifth, W. W. Ettleman, Percival; sixth, Mrs. E. S. Randall, Sigourney; seventh, Bertha Bailey, Ottumwa; eighth, Walter Russell, Indianola; ninth, D. W. Bruns, Sigourney; tenth, Thos. Thompson, Villisca.

Single Ear Yellow ($15, $12, $10, $8, $5, $3, $2, $2, $1, $1)—First, Ellsworth Bailey, Ottumwa; second, Krizer Bros., Eddyville; third, Ray Redfern, Yarmouth; fourth, Mack Utterback, Sigourney; fifth, C. E. Malone, Atlantic; sixth, Herbert Patterson, Carlisle; seventh, N. H. Krizer, Rose Hill; eighth, Mrs. E. S. Randall, Sigourney; ninth, Bruce Hanna, Lacey; tenth, Miss Bertha Bailey, Ottumwa.

Single Ear White ($12, $10, $8, $6, $3, $2, $2, $1)—First, Ellsworth Bailey, Ottumwa; second, Miss Bertha Bailey, Ottumwa; third, D. W. Bruns, Sigourney; fourth, L. L. Hunter, Drakesville; fifth, Mrs. E. S. Randall, Sigourney; sixth, Mack Utterback, Sigourney; seventh, Thos. Thompson, Villisca; eighth, W. W. Ettleman, Percival.

NORTHERN AND NORTH CENTRAL DISTRICTS

Ten Ears Other than White or Yellow ($5, $4, $3)—First, W. J. Irving, Blairsburg; second, L. Emanuel Peterson, Harcourt; third, P. M. Peterson, Cherokee.

Single Ear Other than White or Yellow ($4, $3, $2, $1)—First, L. Emanuel Peterson, Harcourt; second, W. J. Irving, Blairsburg; third, C. H. Arthur, Spirit Lake; fourth, P. M. Peterson, Cherokee.

SOUTH CENTRAL AND SOUTHERN DISTRICTS

Ten Ears Other than Yellow or White ($5, $4, $3, $2, $1)—First, Willard Zeller, Jefferson; second, W. F. Otcheck, Altoona; third, Carl L. Blair, Mitchellville; fourth, Andrew Kirsch, Carroll; fifth, C. E. Malone, Atlantic.

SWEEPSTAKES

Ten Ears Yellow ($15)—N. H. Krizer, Rose Hill.

Ten Ears White ($15)—Ellsworth Bailey, Ottumwa.

Ten Ears Other than Yellow or White ($10)—Willard Zeller, Jefferson.

Single Ear Yellow ($10)—L. Emanuel Peterson, Harcourt.

Single Ear White ($10)—Ellsworth Bailey, Ottumwa.

Single Ear Other than Yellow or White ($5)—First, Andrew Kirsch, Carroll.

GRAND SWEEPSTAKES

Ten Ears, Any Variety (Ribbon)—Ellsworth Bailey, Ottumwa.

Single Ear, Any Variety (Ribbon)—Ellsworth Bailey, Ottumwa.

SWEET CORN AND POP CORN

Ten Ears Small Early Sweet Corn ($8, $6, $4, $2)—First, J. L. Todd, Des Moines; second, J. E. Cornwell, Ankeny; third, Matt Baker, Mitchellville; fourth, Marion Cappock, Ankeny.

Ten Ears Late Sweet Corn ($8, $6, $4, $2)—First, G. B. Cappock, Ankeny; second, J. L. Todd, Des Moines; third, J. H. Comer, Des Moines; fourth, Marion Cappock, Ankeny.

Ten Ears Evergreen Roasting Ears for Table Use in Husks ($3, $2, $1) —First, A. C. Adamson, Ankeny; second, John Justice, Ankeny; third, Griffith Bros., Des Moines.

Ten Ears Country Gentleman Roasting Ears for Table Use in Husks ($3, $2, $1)—First, Paul Peters, Ankeny; second, F. L. Overley, Indianola; third, Walter Russell, Indianola.

Ten Ears White Rice Pop Corn ($8, $6, $4, $2)—First, J. L. Todd, Des Moines; second, J. H. Comer, Des Moines; third, W. F. Otcheck, Altoona; fourth, Marion Cappock, Ankeny.

Ten Ears Any Other Variety Pop Corn ($8, $6, $4, $2)—First, Wm. Switzer, Boone; second, W. F. Otcheck, Altoona; third, J. E. Cornwell, Ankeny; fourth, E. W. Kibler, Agency.

GRAINS AND SEEDS

Winter Wheat ($6, $5, $4, $3, $2, $1)—First, Paul Peters, Ankeny; second, Raymond Hethershaw, Des Moines; third, W. F. Otcheck, Altoona; fourth, Ray Redfern, Yarmouth; fifth, Frank Justice, Berwick; sixth, John Justice, Ankeny.

Spring Wheat ($6, $5, $4, $3, $2, $1)—First, J. A. Mason, Carlisle; second, John Frush, Pleasantville; third, J. T. Wasson, Panora; fourth, E. M. Wilson, Panora; fifth, J. W. Freel, Pleasantville; sixth, John Justice, Ankeny.

Small Early Oats ($6, $5, $4, $3, $2, $1)—First, Ray Redfern, Yarmouth; third, Forrest H. Ford, Tipton; fourth, H. F. Osterland, Faulkner; fifth, J. L. Taylor, Mitchellville; sixth, Leland Taylor, Mitchellville.

Swedish Type Oats ($6, $5, $4, $3, $2, $1)—First, W. F. Otcheck, Altoona; second, J. B. Beck, Ames; third, W. H. Irving, Blairsburg; fourth, W. F. Lyon, Pleasantville; fifth, L. Emanuel Peterson, Harcourt; sixth, J. T. Wasson, Panora.

Silver Mine Type Oats ($6, $5, $4, $3, $2, $1)—First, Ray Redfern, Yarmouth; second, Paul Peters, Ankeny; third, John Frush, Pleasantville; fourth, Adam Stumm, Des Moines; fifth, W. F. Otcheck, Altoona; sixth, J. A. Mason, Carlisle.

Large Colored Oats ($4, $3, $2, $1)—First, W. F. Otcheck, Altoona; second, Jesse Bige, Cedar Falls; third, H. F. Osterland, Faulkner; fourth, W. J. Wasson, Panora.

Rye ($4, $3, $2, $1)—First, Ray Redfern, Yarmouth; second, E. M. Wilson, Panora; third, C. E. Malone, Atlantic; fourth, J. W. Freel, Pleasantville.

Barley ($5, $4, $3, $2, $1)—First, J. A. Mason, Carlisle; second, C. H. Arthur, Spirit Lake; third, E. M. Wilson, Panora; fourth, W. F. Otcheck, Altoona; fifth, Forrest H. Ford, Tipton.

Speltz ($4, $3, $2)—First, C. E. Malone, Atlantic; second, J. T. Wasson, Panora; third, J. E. Cornwell, Ankeny.

Buckwheat ($4)—First, J. A. Mason, Carlisle.

Timothy Seed ($5, $4, $3, $2, $1)—First, Ray Redfern, Yarmouth; second, W. F. Otcheck, Altoona; third, Carl Holden, Williamsburg; fourth, Forrest H. Ford, Tipton; fifth, J. E. Cornwell, Ankeny.

Red Clover Seed ($5, $4, $3, $2, $1)—First, Matt Baker, Mitchellville; second, Carl Holden, Williamsburg; third, Harry Groves, Williamsburg; fourth, ; fifth, John Frush, Pleasantville.

Millet Seed (May be One Year Old) ($4, $3, $2)—First, W. F. Otcheck, Altoona; second, J. T. Wasson, Panora; third, John Justice, Ankeny.

Flax Seed ($4, $3)—Second, Raymond Hethershaw, Des Moines.

GRASS AND FORAGE

Timothy Sheaf, Hay ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, Norman Hethershaw, Des Moines; third, Ray Redfern, Yarmouth; fourth, Carl Holden, Williamsburg; fifth, J. T. Wasson, Panora.

Red Top Sheaf, Hay ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, W. F. Otcheck, Altoona; third, Adam Stamm, Des Moines; fourth, W. F. Lyon, Pleasantville; fifth, J. T. Wasson, Panora.

Medium Red Clover Sheaf, Hay ($5, $4, $3, $2, $1)—First, W. F. Otcheck, Altoona; second, Raymond Hethershaw, Des Moines; third, Ray Redfern, Yarmouth; fourth, Norman Hethershaw, Des Moines; fifth, J. T. Wasson, Panora.

Mammoth Red Clover Sheaf, Hay ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, ; third, C. E. Malone, Atlantic; fourth, Wm. Green, Gruver; fifth, T. A. Chantland, Badger.

Alsike Clover Sheaf, Hay ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, Carl Holden, Williamsburg; third, W. F. Lyon, Pleasantville; fourth, J. L. Hamilton, Lucas; fifth, W. F. Otcheck, Altoona.

Alfalfa Clover Sheaf, Hay ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, Norman Hethershaw, Des Moines; third, W. F. Otcheck, Altoona; fourth, Adam Stamm, Des Moines; fifth, J. T. Wasson, Panora.

Millet Sheaf, Hay ($5, $4, $3, $2, $1)—First, Norman Hethershaw, Des Moines; second, Raymond Hethershaw, Des Moines; third, H. R. Malone, Atlantic; fourth, E. M. Wilson, Panora; fifth, J. T. Wasson, Panora.

Blue Grass Sheaf, Hay ($5, $4, $3, $2, $1)—First, Norman Hethershaw, Des Moines; second, Raymond Hethershaw, Des Moines; third, Adam Stamm, Des Moines; fourth, John Frush, Pleasantville; fifth, J. T. Wasson, Panora.

Sudan Grass Sheaf, Hay ($4, $3, $2, $1)—First, Raymond Hethershaw; second, W. F. Otcheck, Altoona; third, E. M. Wilson, Panora; fourth, J. E. Cornwell, Ankeny.

SHEAF GRAIN

Wheat in Straw, Spring ($5, $4, $3, $2, $1)—First, Carl Holden, Williamsburg; second, Erma Hunt, Carlisle; third, Raymond Hethershaw, Des Moines; fourth, Frank Kouba, Blairstown; fifth, Norman Hethershaw, Des Moines.

Wheat in Straw, Winter ($5, $4, $3, $2, $1)—First, Flo Clark, Carlisle; second, Harry Hilton, Malvern; third, Norman Hethershow, Des Moines; fourth, Walter Russell, Indianola; fifth, Harry Groves, Williamsburg.

Barley in Straw ($5, $4, $3, $2, $1)—First, L. Emanuel Peterson, Harcourt; second, J. A. Mason, Carlisle; third, W. F. Otcheck, Altoona; fourth, Carl Holden, Williamsburg; fifth, Frank Kouba, Blairstown.

Oats in Straw, Early ($5, $4, $3, $2, $1)—First, Ray Redfern, Yarmouth; second, Adam Stamm, Des Moines; third, W. F. Lyon, Pleasantville; fourth, J. A. Mason, Carlisle; fifth, Frank Kouba, Blairstown.

Oats in Straw, Late ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, W. F. Otcheck, Altoona; third, Frank Kouba, Blairstown; fourth, John Frush, Pleasantville; fifth, Wm. Jenkins, Knoxville.

Rye in Straw ($5, $4, $3, $2, $1)—First, Adam Stamm, Des Moines; second, Ray Redfern, Yarmouth; third, C. E. Malone, Atlantic; fourth, Edwin Justice, Ankeny; fifth, J. A. Mason, Carlisle.

Flax for Seed, May be One Year Old ($5, $4, $3, $2, $1)—First, Ray Redfern, Yarmouth; second, J. L. Uban, Sibley; third, Raymond Hethershaw, Des Moines; fourth, W. F. Otcheck, Altoona; fifth, C. E. Malone, Atlantic.

Ripe Millet for Seed ($5, $4, $3, $2, $1)—First, J. A. Mason, Carlisle; second, Raymond Hethershaw, Des Moines; third, W. F. Otcheck, Altoona; fourth, Norman Hethershaw, Des Moines; fifth, C. E. Malone, Atlantic.

Speltz ($5, $4, $3, $2, $1)—First, W. F. Otcheck, Altoona; second, J. T. Wasson, Panora; third, Malone Bros., Atlantic; fourth, J. E. Cornwell, Ankeny; fifth, C. E. Malone, Atlantic.

Timothy Sheaf, Seed ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, Norman Hethershaw, Des Moines; third, Adam Stamm, Des Moines; fourth, J. L. Hamilton, Lucas; fifth, J. T. Wasson, Panora.

Blue Grass Sheaf, Seed ($5, $4, $3, $2, $1)—First, Raymond Hethershaw, Des Moines; second, Norman Hethershaw, Des Moines; third, W. F. Otcheck, Altoona; fourth, C. E. Malone, Atlantic; fifth, Ray Redfern, Yarmouth.

Sudan Grass Sheaf, Seed ($4, $3, $2, $1)—First, H. P. Cornwell, Ankeny; second, J. E. Cornwell, Ankeny; third, W. F. Otcheck, Altoona; fourth, W. F. Lyon, Pleasantville.

POTATOES

(Early Varieties)

Early Ohio ($10, $6, $4, $3, $2, $1, $1)—First, Jas. Heathershaw & Son, Des Moines; second, H. B. Blake, Carlisle; third, W. E. Utterback, Sigourney; fourth, J. R. Griffieon, Mitchellville; fifth, C. E. Malone, Atlantic; sixth, Carl Holden, Williamsburg; seventh, John Frush, Pleasantville.

Bliss Triumph ($10, $6, $4, $3, $2)—First, W. F. Otcheck, Altoona; second, Jas. Heathershaw & Son, Des Moines; third, W. E. Utterback, Sigourney; fourth, Sestier Bros., Des Moines; fifth, Chas. M. Pink, Des Moines.

Beauty of Hebron ($10, $6, $4, $3)—First, Jas. Heathershaw & Sons, Des Moines; second, Chas. M. Pink, Des Moines; third, John Frush, Pleasantville; fourth, W. E. Utterback, Sigourney.

Sweepstakes Early Varieties ($5)—W. F. Otcheck, Altoona.

(Midseason)

Irish Cobbler ($10, $6, $4, $3, $2, $1, $1)—First, W. E. Utterback, Sigourney; second, Mack Utterback, Sigourney; third, Effie M. Backe, Hubbard; fourth, J. T. Wasson, Panora; fifth, Carl Holden, Williamsburg; sixth, Sestier Bros., Des Moines; seventh, Chas. M. Pink. Des Moines.

Maggie Murphy ($10, $6, $4, $3, $2)—First, W. F. Otcheck, Altoona; second, Sestier Bros., Des Moines; third, W. E. Utterbaack, Sigourney; fourth, Chas. M. Pink, Des Moines; fifth, Jas. Heathershaw & Sons, Des Moines.

Blue Victor ($10, $6, $4, $3, $2, $1)—First, W. F. Otcheck, Altoona; second; J. T. Wasson, Panora; third, Sestier Bros., Des Moines; fourth, Chas. M. Pink, Des Moines; fifth, W. E. Utterback, Sigourney; sixth, John Frush, Pleasantville.

Sweepstakes Midseason Varieties ($5)—W. E. Utterback, Sigourney.

(Late)

Bonanza ($10, $6, $4, $3)—First, W. F. Otcheck, Altoona; second, Chas. M. Pink, Des Moines; third, Jas. Heathershaw & Sons, Des Moines; fourth, W. E. Utterback, Sigourney.

Rural New Yorker ($10, $6, $4, $3, $2, $1, $1)—First, A. E. Johnson, Laurens; second, W. F. Otcheck, Altoona; third, J. R. Griffieon, Mitchellville; sixth, Wm. Wolf, Grimes; seventh, Chas. M. Pink, Des Moines, Iowa.

Seneca Beauty ($10, $6, $4, $3, $2, $1, $1)—First, J. T. Wasson, Panora; second, Sestier Bros., Des Moines; third, J. W. Freel, Pleasantville; fourth, W. E. Utterback, Sigourney; fifth, Chas. M. Pink, Des Moines; sixth, W. F. Otcheck, Altoona; seventh, Jas. Heathershaw & Sons, Des Moines.

Sweepstakes, Late Varieties ($5)—A. E. Johnson, Laurens.

MISCELLANEOUS

Collection to Consist of at Least Ten Varieties ($40, $25, $20, $15, $12, $7)—First, W. F. Otcheck, Altoona; second, W. E. Utterback, Sigourney; third, Jas. Heathershaw & Sons, Des Moines; fourth, Chas. M. Pink, Des Moines; fifth, Emil Smykil, Solon; sixth, Effie M. Backe, Hubbard.

Any Meritorious Variety Not Listed Above, Limited to Ten Varieties —(Early Rose) ($3, $2)—First, Jas. Heathershaw, Des Moines; second, J. W. Freel, Pleasantville.

Late Rose ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Chas. M. Pink, Des Moines; third, John Frush, Pleasantville.

Burbank ($3, $2, $1)—First, W. E. Utterback, Sigourney; second, Sestier Bros., Des Moines; third, Jas. Heathershaw & Sons, Des Moines.

Blue Mechanics ($3, $2, $1)—First, Chas. M. Pink, Des Moines; second, Sestier Bros., Des Moines; third, W. E. Utterback, Sigourney.

King Potatoes ($3, $2, $1)—First, Chas. M. Pink, Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Sestier Bros., Des Moines.

Peach Blow ($3, $2, $1)—First, W. E. Utterback, Sigourney; second, Sestier Bros., Des Moines; third, Chas. M. Pink, Des Moines.

Pinkeye ($3, $2, $1)—First, Chas. M. Pink, Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Sestier Bros., Des Moines.

Hinkley ($3, $2)—First, Chas. M. Pink, Des Moines; second, W. E. Utterbeck, Sigourney.

Russets ($3, $2)—First, Sestier Bros., Des Moines; second, John Frush, Pleasantville.

Miscellaneous Jersey Red Spud ($3)—First, Sestier Bros., Des Moines.

Sweepstakes in Miscellaneous Varieties ($5)—Chas. M. Pink, Des Moines.

GRAND SWEEPSTAKES

Competition Limited to Sweepstakes Winners in Four Divisions ($10)—First, A. E. Johnson, Laurens.

SWEET POTATOES

Red Jersey Sweet Potatoes ($5, $3, $2)—First, Sestier Bros., Des Moines; second, J. M. Henderson, Des Moines; third, Chas. M. Pink, Des Moines.

Yellow Jersey Sweet Potatoes ($5, $3, $2)—First, Sestier Bros., Des Moines; second, J. M. Henderson, Des Moines; third, Jas. Heathershaw & Sons, Des Moines.

White Sweet Potatoes ($5, $3, $2)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Chas. M. Pink, Des Moines.

Any Meritorious Variety Not Listed Above, Limited to Three Varieties —(Nancy Hall) ($3, $2, $1)—First, Chas. M. Pink, Des Moines; second, Sestier Bros., Des Moines; third, J. M. Henderson, Des Moines.

Porto Rico ($3, $2, $1)—First, Chas. M. Pink, Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Sestier Bros., Des Moines.

Miscellaneous Sweet Potatoes ($3, $2, $1)—First, J. R. Griffieon, Mitchellville; second, Jas. Heathershaw & Sons, Des Moines; third, Chas. M. Pink, Des Moines.

SPECIAL PRIZES

For the Best Lot Grown from Red River Valley Certified Seed, Tag Attached to Exhibit ($15, $10, $5)—First, W. E. Utterback, Sigourney; second, F. L. Overley, Indianola; third, Chas. M. Pink, Des Moines.

FIELD OR STOCK VEGETABLES

Beets, White, Half Sugar, Three Specimens ($3, $2, $1)—First, Jas. Heathershaw & Son, Des Moines; second, Gale Reed, Ames; third, Cyrus E. Harvey, Altoona.

Beets, Mangel-Wursels, Three Specimens ($3, $2, $1)—First, D. W. Bruns, Sigourney; second, Cyrus E. Harvey, Altoona; third, Gale Reed, Ames.

Beets, Golden Tankard, Three Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Wm. Griffieon, Mitchellville; third, Elmer Reed, Ames.

White Carrots for Stock, Six Specimens ($3, $2, $1)—First, C. W. Phelps, Des Moines; second, Gale Reed, Ames; third, Sestier Bros., Des Moines.

Pumpkins, Ripe Field, Two Specimens ($3, $2, $1)—First, J. E. Proudfit, Altoona; second, W. Gale McMillen, Waukee; third, V. L. Riggan, Altoona.

Rutabagas, for Stock, Any Variety, Six Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, Gale Reed, Ames.

Squash, for Stock, Two Specimens ($3, $2, $1)—First, C. W. Packer, Altoona; second, Sestier Bros., Des Moines; third, Jas. Heathershaw & Sons, Des Moines.

Turnips for Stock, Six Specimens ($3, $2, $1)—First, Elmer Reed, Ames; second, Sestier Bros., Des Moines; third, Jas. Heathershaw & Sons, Des Moines.

BEST SPECIMEN OF FIELD OR STOCK VEGETABLES, NOT DEFORMED

Largest Pumpkin ($3, $2, $1)—First, Sestier Bros., Des Moines; second, I. E. Proudfit, Altoona; third, V. L. Riggan, Altoona.

Largest Squash ($3, $2, $1)—First, C. W. Packer, Altoona; second, Sestier Bros., Des Moines; third, Jas. Heathershaw & Sons, Des Moines.

Largest White Carrot ($3, $2, $1)—First, Elmer Reed, Ames; second, C. W. Phelps, Des Moines; third, Jas. Heathershaw & Sons, Des Moines.

Largest Beet, Mangel-Wurzel ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Elmer Reed, Ames; third, Gale Reed, Ames.

Largest Turnip ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, S. A. Shetterly, Hartford; third, Chas. M. Pink, Des Moines.

Largest Rutabaga ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, Jas. Heathershaw & Sons, Des Moines.

VEGETABLE ROOT CROP

Red Globe Onions, One Dozen ($3, $2, $1)—First, Harry Wyatt, Des Moines; second, Jas. Heathershaw & Son, Des Moines; third. Sestier Bros., Des Moines.

White Globe Onions, One Dozen ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, J. H. Comer. Des Moines.

Yellow Globe Onions, One Dozen ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Harry Wyatt, Des Moines; third, John Frush, Pleasantville.

Twelve Largest Onions, Any Variety ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Erma Hunt, Carlisle; third, W. E. Utterback, Sigourney.

Best One Dozen Onions Not Named Above ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, John Frush, Pleasantville; third, Chas. M. Pink, Des Moines.

Turnips, One-half Dozen ($3, $2, $1)—First, C. W. Phelps, Des Moines; second, Chas. M. Pink, Des Moines; third, Cyrus E. Harvey, Altoona.

Rutabagas, Turnips, One-half Dozen, Yellow Flesh ($3, $2, $1)—First, Cyrus E. Harvey, Altoona; second, Sestier Bros., Des Moines; third, Elmer Reed, Ames.

Parsnips, One-half Dozen ($3, $2, $1)—First, Chas. M. Pink, Des Moines; second, Sestier Bros., Des Moines; third, Cyrus E. Harvey, Altoona.

Carrots for Table Use, One-half Dozen ($3, $2, $1)—First, C. W. Phelps, Des Moines; second, J. H. Comer, Des Moines; third, Adam Stamm, Des Moines.

Commercial Sugar Beets ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Sestier Bros., Des Moines.

Beets for Table Use, One-fourth Dozen ($3, $2, $1)—First, Harry Wyatt, Des Moines; second, Chas. M. Pink, Des Moines; third, Wm. Griffieon, Mitchellville.

Vegetable Oysters, One-half Dozen ($3, $2, $1)—First, J. R. Griffieon, Mitchellville; secod, Chas. M. Pink, Des Moines; third, C. W. Phelps, Des Moines.

TABLE VEGETABLES

Shelled Ground Cherries, One Quart ($3, $2, $1)—First, Cyrus E. Harvey; second, J. R. Griffieon, Mitchellville.

Beans, Pole Lima, Shelled, One Quart ($3, $2, $1)—First, Cyrus E. Harvey, Altoona; second, J. R. Griffieon, Mitchellville; third, J. M. Henderson, Des Moines.

Beans, Henderson's Bush Lima, Shelled, One Quart ($3, $2, $1)—First, H. H. Comer, Des Moines; second, J. R. Griffieon, Mitchellville; third, J. M. Henderson, Des Moines.

Beans, White Navy, Shelled, One Quart ($3, $2, $1)—First, A. C. Adamson, Des Moines; second, Elizabeth Harbacheek, Moorland, Iowa; third, J. R. Griffieon, Mitchellville.

Cabbage, Early Jersey Wakefield, Three Heads ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Sestier Bros., Des Moines; third, Chas. M. Pink, Des Moines.

Cabbage, Late Flat, Three Heads ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, Wm. Wolf, Grimes.

Cabbage, Red, Three Heads ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, Jas. Heathershaw & Sons, Des Moines.

Cabbage, Savoy, Three Heads ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Chas. M. Pink, Des Moines.

Cabbage, Three Heaviest Heads ($3, $2, $1)—First, C. W. Phelps, Des Moines; second, Sestier Bros., Des Moines; third, Jas. Heathershaw & Sons, Des Moines.

Cabbage, Round, Any Variety, Three Heads ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Son, Des Moines; third, P. P. Harvey, Ft. Des Moines.

Cauliflower, Three Heads ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, C. W. Phelps, Des Moines; third, Chas. M. Pink, Des Moines.

Cucumbers, Ripe, Three Specimens ($3, $2, $1)—First, Wm. Wolf, Grimes; second, Mrs. G. P. Klein, Altoona; third, F. E. Law, Ankeny.

Cucumbers, For Slicing, Six Specimens ($3, $2, $1)—First, C. W. Phelps, Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Chas. M. Pink, Des Moines.

Celery, Red, Roots Attached, Six Stalks ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, John Frush, Pleasantville.

Celery, White, Roots Attached, Six Stalks ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Effie M. Backe, Hubbard.

Egg Plants, Three Specimens ($3, $2, $1)—First, J. H. Comer, Des Moines; second, C. W. Phelps, Des Moines; third, Mrs. T. J. Flora, Des Moines.

Kohl Rabi, Three Heads ($3, $2, $1)—First, Wm. Jenkins, Knoxville; second, A. R. Soder, Hartford; third, F. L. Overley, Indianola.

Muskmelons, Green Fleshed, Three Specimens ($3, $2, $1)—First, Cyrus E. Harvey, Altoona; second, Sestier Bros., Des Moines; third, Chas. M. Pink, Des Moines.

Muskmelons, Salmon Fleshed, Three Specimens ($3, $2, $1)—First, Harry Wyatt, Des Moines; second, J. R. Griffieon, Mitchellville; third, H. B. Blake, Carlisle.

Peppers, Green Mango, Twelve Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Chas. M. Pink, Des Moines; third, Harry Wyatt, Des Moines.

Peppers, Red Mango, Twelve Specimens ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Sestier Bros., Des Moines; third, Mrs. T. J. Flora, Des Moines.

Peppers, Red, Twelve Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, Jas. Heathershaw & Sons, Des Moines.

Peppers, Red Cayenne, Twelve Specimens ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Cyrus E. Harvey, Altoona; third, C. W. Phelps, Des Moines.

Pumpkins, Ripe Sweet, Two Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, J. T. White, Des Moines; third, W. F. Otcheck, Altoona.

Rhubarb, for Table Use, Six Stalks ($3, $2, $1)—First, Wm. Wolf, Grimes; second, A. C. Adamson, Ankeny; third, C. W. Phelps, Des Moines.

Squash, Banana, Two Specimens ($3, $2, $1)—First, John Frush, Pleasantville; second, Jas. Heathershaw & Sons, Des Moines; third, Sestier Bros., Des Moines.

Squash, Boston Marrow, Two Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Chas. M. Pink, Des Moines.

Squash, Crook Neck, Two Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, C. W. Phelps, Des Moines.

Squash, Delicious, Two Specimens ($3, $2, $1)—First, Cyrus E. Harvey, Altoona; second, Jas. Heathershaw & Sons, Des Moines; third, J. W. Freel, Pleasantville.

Squash, Essex Hybrid, Two Specimens ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Sestier Bros., Des Moines; third, Chas. M. Pink, Des Moines.

Squash, Hubbard, Two Specimens ($3, $2, $1)—First, Griffith Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, Jas. Heathershaw & Sons, Des Moines.

Squash, Marblehead, Two Specimens ($3, $2, $1)—First, Jas. Heathershaw & Sons, Des Moines; second, Cyrus E. Harvey, Altoona; third, C. M. Pink Des Moines.

Table Queen or Danish, Two Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; secod, Cyrus E. Harvey, Altoona; third, Jas. Heathershaw & Sons, Des Moines.

Squash, Sibley, Two Specimens ($3, $2, $1)—First, John Frush, Pleasantville; second, Sestier Bros., Des Moines; third, Cyrus E. Harvey, Altoona.

Tomatoes, Red, Twelve Specimens ($3, $2, $1)—First, Sestier Bros., Des Moines; second, Harry Wyatt, Des Moines; third, Cyrus E. Harvey, Altoona.

Tomatoes, Purple, Twelve Specimens ($3, $2, $1)—First, Harry Wyatt, Des Moines; second, Cyrus E. Harvey, Altoona; third, Chas. M. Pink, Des Moines.

Tomatoes, Yellow, Twelve Specimens ($3, $2, $1)—First, C. W. Phelps, Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, J. L. Hamilton, Lucas.

Tomatoes, Largest Any Variety, Twelve Specimens ($3, $2, $1)—First, Harry Wyatt, Des Moines; second, Cyrus E. Harvey, Altoona; third, C. W. Phelps, Des Moines.

Watermelons, Two Specimens ($3, $2, $1)—First, Cyrus E. Harvey, Altoona; second, Jas. Heathershaw & Sons, Des Moines; third, Sestier Bros., Des Moines.

DISPLAYS

Display of Onions to Consist of Not Less Than Five Varieties of Five Specimens Each ($10, $6, $4, $2)—First, Jas. Heathershaw & Sons, Des Moines; second, Chas. M. Pink, Des Moines; third, John Frush, Pleasantville; fourth, Sestier Bros., Des Moines.

Display of Tomatoes to Consist of Five Varieties of Five Specimens Each ($10, $6, $4, $2)—First, Chas. M. Pink, Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Sestier Bros., Des Moines; fourth, C. W. Phelps, Des Moines.

Display of Peppers to Consist of Not Less Than Five Varieties of Five Specimens Each ($10, $6, $4, $2)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Chas. M. Pink, Des Moines; fourth, C. W. Phelps, Des Moines.

VEGETABLE SWEEPSTAKES

Sweepstakes ($30, $25, $20, $15, $10)—First, Sestier Bros., Des Moines; second, Jas. Heathershaw & Sons, Des Moines; third, Chas. M. Pink, Des Moines; fourth, Cyrus E. Harvey,.Altoona; fifth, C. W. Phelps, Des Moines.

INDIVIDUAL FARM EXHIBIT

SECTION NO. 2

Individual Farm Exhibit From North Central District, Pro Rata on Points Above Minimum ($131.13, $118.87)—First, Mrs. E. J. J. Heise, Arlington; second, P. M. Peterson, Cherokee.

SECTION NO. 3

Individual Farm Exhibit From South Central District, Pro Rata on Points Above Minimum ($138.08, $132.99, $117.02, $111.91)—First, E. M. Wilson, Panora; second, J. T. Wasson, Panora; third, Frank Trucks, Coon Rapids; fourth, John S. Clarke, Boone.

SECTION NO. 4

Individual Farm Exhibit From Southern District, Pro Rata on Points Above Mininmum ($133.61, $128.77, $127.05, $126.60, $121.62, $118.75, $118.60) —First, J. A. Mason, Carlisle; second, Richards Bros., Swan; third, J. W. Freel, Pleasantville; fourth, B. Freel & Son, Pleasantville; fifth, C. E. Malone, Atlantic; sixth, W. F. Lyon, Pleasantville; seventh, Grover Malone, Atlantic.

SECTION NO. 5

Individual Farm Exhibit From Polk County, Pro Rata on Points Above Minimum ($125.00)—First, John Justice, Ankeny.

Sweepstakes for the Highest Scoring Individual Farm Exhibits ($50, $30, $20, $10)—First, E. M. Wilson, Panora; second, J. A. Mason, Carlisle; third, J. T. Wasson, Panora; fourth, John Justice, Ankeny.

COUNTY EXHIBITS

County Exhibit From Northern District, Pro Rata on Points Above Minimum ($250.00)—First, Osceola County.

County Exhibit From North Central District, Pro Rata on Points Above Minimum ($280.74, $219.26)—First, Webster county; second, Hardin county.

County Exhibit From South Central District, Pro Rata on Points Above Minimum ($289.25, $279.54; $263.13, $248.87, $230.79, $221.95, $216.47)—First, Polk county; second, Guthrie county; third, Carroll county; fourth, Greene county; fifth, Poweshiek county; sixth, Boone county; seventh, Audubon county.

County Exhibit From Southern District, Pro Rata on Points Above Minimum ($279.53, $255.08, $248,97; $246.98, $239.01, $230.43)—First, West Pottawattamie county; second, Clarke county; third, Cass county; fourth, Warren county; fifth, Marion county; sixth, Adair county.

Sweepstakes for the Highest Scoring County Exhibit ($50, $30, $20, $10) —First, Polk county; second, Guthrie county; third, W. Pottawattamie county; fourth, Carroll county.

In order to encourage care in arrangement and decorating exhibits five special premiums are offered for the most attractive, best decorated and best arranged exhibit ($30, $25, $20, $15, $10)—First, Polk county; second, Guthrie county; third, Carroll county; fourth, Cass county; fifth, Clarke county.

CULINARY DEPARTMENT

SUPERINTENDENT.....................H. O. WEAVER, Wapello, Iowa.
JUDGE..MRS. J. BARLOW.

BREAD, ETC.

Loaf Yeast Bread ($10, $7, $5, $3, $2)—First, Mrs. C. N. Hill, Indianola; second, Mrs. O. S. Hall, Des Moines; third, Mrs. J. F. Randolph, Ankeny; fourth, Mrs. C. F. Spring, Des Moines; fifth, Mrs. Chas. Arnold, Des Moines.

Loaf Salt Rising Bread ($5, $4, $3, $2, $1)—First, Mrs. J. A. Peters, Ankeny; second, Mrs. C. M. Cross, Des Moines; third, Mrs. Cyrus E. Harvey, Altoona; fourth, Mrs. Chas. Arnold, Des Moines; fifth, Mrs. A. A. Johnson, Gladbrook.

Loaf Graham Bread ($5, $4, $3, $2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. C. M. Chapman, Des Moines; third, Mrs. J. A. Peters, Ankeny; fourth, Mrs. J. B. Beck, Ames; fifth, Mrs. F. H. Sinclair, Des Moines.

Loaf Nut Bread ($5, $4, $3, $2, $1)—First, Mrs. A. A. Johnson, Gladbrook; second, Mrs. J. A. Peters, Ankeny; third, Mrs. J. L. Hoah, Des Moines; fourth, Mrs. F. H. Sinclair, Des Moines; fifth, Odessa Porter Llewellyn, Waukee.

Loaf Entire Wheat Bread ($5, $4, $3, $2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. M. Kastberg, Des Moines; third, Mrs. Oliver Moe, Algona; fourth, Mrs. A. A. Johnson, Gladbrook; fifth, Mrs. J. A. Peters, Ankeny.

Pan of Rolls ($5, $4, $3, $2, $1)—First, Mrs. Chas. Arnold, Des Moines; second, Mrs. C. F. Spring, Des Moines; third, Mrs. W. C. Ravey, Des Moines; fourth, Mrs. Fred Meacham, Adelphi; fifth, Mrs. C. N. Hill, Indianola.

Loaf Rye Bread ($5, $4, $3, $2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. J. A. Peters, Ankeny; third, Mrs. Chas. Walter, Altoona; fourth, Mrs. H. Johnson, Gladbrook; fifth, Mrs. F. H. Sinclair, Des Moines.

Loaf Corn Bread ($5, $4, $3, $2, $1)—First, Lula L. Baird, Des Moines; second, Mrs. A. A. Johnson, Gladbrook; third, Mrs. Jesse Alexander, Indianola; fourth, Anna Ault, Mitchellville; fifth, Mrs. Frank E. Huston, Waukee.

CAKE

Fruit ($3, $2, $1)—First, Mrs. E. L. Thompson, Des Moines; second, Miss Esther Seiberling, Mitchellville; third, Mrs. A. A. Johnson, Gladbrook.

Pound ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Anna B. Frost, Des Moines.

Sponge ($3, $2, $1)—First, Anna B. Frost, Des Moines; second, Mrs. T. J. Flora, Des Moines; third, Mrs. H. H. Johnston, Des Moines.

Watermelon ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, B. Stebbings, Des Moines.

Coffee ($3, $2, $1)—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Jesse Alexander, Indianola; third, Anna B. Frost, Des Moines.

Marble ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Mrs. J. B. Beck, Ames.

Angel Food ($3, $2, $1)—First, Ruth Erskin, Runnells; second, Mrs. Lee A. Perry, Indianola; third, Mrs. Asa Lee, Mitchellville.

Sunshine ($3, $2, $1)—First, Mrs. Ella Mote, Des Moines; second, Mrs. M. Davis, Des Moines; third, Mrs. C. M. Cross, Des Moines.

Fairy Loaf ($3, $2)—First, Mrs. Jesse Alexander, Indianola; second, Lulu L. Baird, Des Moines.

Bride's Cake ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Esther Brazelton, Ankeny; third, Mrs. Frank E. Huston, Waukee.

Nut Loaf, White ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. A. H. Ketchum, Des Moines; third, Esther Brazelton, Ankeny.

Devil's Food ($3, $2, $1)—First, Mrs. F. B. Moore, Des Moines; second, Lulu L. Baird, Des Moines; third, Mrs. Jesse Alexander, Indianola.

White Citron ($3)—First, Mrs. Jesse Alexander, Indianola.

Cocoanut Loaf ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Ina Morton, Indianola.

Currant Loaf ($3)—First, Mrs. Jesse Alexander, Indianola.

Election Loaf ($3, $2, $1)—First, Mrs. T. J. Flora, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Mrs. E. M. Sinclair, Des Moines.

White Fruit ($3, $2)—First, Mrs. Jesse Alexander, Indianola; second, Anna B. Frost, Des Moines.

Gold Cake ($3, $2, $1)—First, Bud Decker Smith, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Mrs. A. H. Ketchum, Des Moines.

Jam Cake ($3, $2, $1)—First, Lulu L. Baird, Des Moines; second, Anna B. Frost, Des Moines; third, Mrs. Jesse Alexander, Indianola.

LAYER CAKES

Almond ($3, $2, $1)—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Anna B. Gannon, Valley Junction; third, Mrs. Jesse Alexander, Indianola.

Banana ($3, $2)—First, Mrs. Jesse Alexander, Indianola; second, Ferne Botsford, Des Moines.

Caramel or Burnt Sugar Cake ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. J. H. Hoak, Des Moines; third, Mrs. Harry Haddick, Des Moines.

White, Caramel Frosting ($3, $2, $1)—First, Mrs. Anna B. Gannon, Valley Junction; second, Miss Esther Seiberling, Mitchellville; third, E. Heydon, Mitchellville.

Chocolate Layer, White Frosting ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Mrs. Harry Haddick, Des Moines.

Chocolate White Layer, Chocolate Frosting ($3, $2, $1)—First, Miss Esther Seiberling, Mitchellville; second, Mrs. Anna B. Gannon, Valley Junction; third, Mrs. J. B. Putnam, Des Moines.

Cocoanut ($3, $2, $1)—First, Miss Esther Seiberling, Mitchellville; second, Mrs. A. H. Ketchum, Des Moines; third, Mrs. Lee A. Perry, Indianola.

Fig, White Layer ($3, $2, $1)—First, Miss Esther Seiberling, Mitchellville; second, Mrs. Frank E. Huston, Waukee; third, Mrs. Fred G. Mote, Des Moines.

Fig, Dark Layer ($3, $2, $1)—First, Ina Morton, Indianola; second, Mrs. Jesse Alexander, Indianola; third, E. Heydon, Mitchellville.

Jelly Layer ($3, $2)—First, Mrs. Jesse Alexander, Indianola; second, Anna B. Frost, Des Moines.

Jelly Roll ($3, $2, $1)—First, Lulu L. Baird, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Mrs. G. W. Parsons, Carlisle.

Lemon Jelly ($3, $2, $1)—First, Anna B. Frost, Des Moines; second, Mrs. Anna B. Gannon, Valley Junction; third, Mrs. Jesse Alexander, Indianola.

Maple ($3, $2, $1)—First, Anna B. Frost, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Anna B. Gannon, Valley Junction.

Marshmallow ($3)—First, Mrs. Jesse Alexander, Indianola.

English Walnut, White ($3, $2, $1)—First, Mrs. Anna B. Gannon, Valley Junction; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Fred G. Mote, Des Moines.

Nut, Spice ($3, $2, $1)—First, Anna B. Frost, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Lee A. Perry, Indianola.

Orange ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Grace Schrool, Runnells; third, Mrs. A. H. Ketchum, Des Moines.

Pineapple ($3)—First, Mrs. Jesse Alexander, Indianola.

Ribbon ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Anna B. Frost, Des Moines; third, Mrs. Frank E. Huston, Waukee.

White Layer, White Frosting ($3, $2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Edward Van Zante, Pella; third, Mrs. A. H. Ketchum, Des Moines.

COOKIES, ETC.

One Dozen Sugar Cookies ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Anna Ault, Mitchellville.

One Dozen Cocoanut Cookies ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Eliza Reynolds, Mitchellville.

One Dozen Fruit Cookies ($2, $1)—First, Miss Esther Seiberling, Mitchellville; second, Mrs. F. H. Sinclair, Des Moines.

One Dozen Nut Cookies ($2, $1)—First, Eliza Reynolds, Mitchellville; second, Fanny McClain, Des Moines.

One Dozen Chocolate Cookies ($2, $1)—First, Ferne Botsford, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

One Dozen Sugar Cookies ($2, $1)—First, Mrs. A. A. Johnson, Gladbrook; second, Mrs. A. Smith, New London.

One Dozen Macaroons ($2, $1)—Second, Mrs. Jesse Alexander, Indianola.

One Dozen Raised Doughnuts ($2, $1)—First, Fern Bishop, Mitchellville; second, Mrs. Cyrus E. Harvey, Altoona.

One Dozen Baking Powder Doughnuts ($2, $1)—First, Mrs. Verle Dunlap, Altoona; second, Mrs. Carl Bishop, Mitchellville.

Loaf Hard Gingerbread ($2, $1)—First, Mrs. J. A. Peters, Ankeny; second, Mrs. A. A. Johnson, Gladbrook.

Loaf Soft Gingerbread ($2, $1)—First, Mrs. Charles Arnold, Des Moines; second, Mrs. J. H. Hoak, Des Moines.

One Dozen Lady Fingers ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. A. A. Johnson, Gladbrook.

One Dozen Almond Wafers ($2, $1)—First, Mrs. F. H. Sinclair, Des Moines; second, Lulu L. Baird, Des Moines.

Basket Fancy Cakes or Cookies ($3, $2)—First, Mrs. Fred Mathis, Des Moines; second, Mrs. Frank E. Huston, Waukee.

HOMEMADE CANDY

Plate French Cream ($2, $1, 50 cents)—First, Mrs. John C. Ash, Des Moines; second, Mrs. Chas. Walter, Altoona; third, Mrs. E. M. Sinclair, Des Moines.

Plate Chocolate Fudge ($2, $1, 50 cents)—First, Mrs. Asa Lee, Mitchellville; second, Miss La Vergne Kinney, Des Moines; third, Berneice Howe, Mitchellville.

Plate Chocolate Creams ($2, $1, 50 cents)—First, Mrs. Clarence Wilbur, Ackworth; second, Mrs. Oliver Moe, Algona; third, Mrs. Asa Lee, Mitchellville.

Plate Divinity Creams ($2, $1, 50 cents)—First, Mrs. Chas. Walter, Altoona; second, Mrs. W. W. Preston, Carlisle; third, Mrs. Asa Lee, Mitchellville.

Plate Taffy ($2, $1)—First, Mrs. Fred G. Mote, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Plate Butterscotch ($2, $1, 50 cents)—First, Mrs. Asa Lee, Mitchellville; second, Mrs. F. W. Moss, Des Moines; third, Mary Winegar, Des Moines.

CONSERVES

Currant ($2, $1)—First Ella Plummer, Des Moines; second, E. L. Thompson, Des Moines.

Cherry ($2, $1)—First, Ella Plummer, Des Moines; second, E. L. Thompson, Des Moines.

Gooseberry ($2, $1)—First, Ella Plummer, Des Moines; second, E. L. Thompson, Des Moines.

Strawberry ($2, $1)—First, Mrs. Howard Eales, Des Moines; second, Ella Plummer, Des Moines.

Peach ($2, $1)—First, Ella Plummer, Des Moines; second, Mrs. Howard Eales, Des Moines.

Rhubarb ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Ella Plummer, Des Moines.

Orange Marmalade ($2, $1)—First, E. L. Thompson, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

SUN PRESERVED FRUIT

Strawberry Sunshine ($2, $1)—First, Mrs. Howard Eales, Des Moines; second, Ella Plummer, Des Moines.

Red Raspberry Sunshine ($2, $1)—First, E. L. Thompson, Des Moines; second, Mrs. Lake Bower, Des Moines.

Cherry Sunshine ($2, $1)—First, Mrs. Howard Eales, Des Moines; second, Ella Plummer, Des Moines.

Peach Sunshine ($2, $1)—First, Mrs. W. W. Preston, Carlisle; second, Mrs. Clarence Alexander, Adelphi.

PRESERVES

Apple ($2, $1)—First, Mrs. W. W. Preston, Carlisle; second, Ella Plummer, Des Moines.

Apricot ($2, $1)—First, E. L. Thompson, Des Moines; second, Mrs. Geo. Grimstead, Mitchellville.

Cherry ($2, $1)—First, Ella Plummer, Des Moines; second, Mrs. Howard Eales, Des Moines.

Crabapple ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

Currant ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Ella Plummer, Des Moines.

Citron ($2, $1)—First, E. L. Thompson, Des Moines; second, R. L. Thompson, Des Moines.

Cranberry ($2, $1)—First, E. L. Thompson, Des Moines; second, R. L. Thompson, Des Moines.

Blackberry ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. Howard Eales, Des Moines.

Gooseberry ($2, $1)—First, Mrs. Ella Plummer, Des Moines; second, Mrs. Seward Long, Burlington.

Black Raspberry ($2, $1)—First, Ella Plummer, Des Moines; second, Mrs. Howard Eales, Des Moines.

Strawberry ($2, $1)—First, Mrs. Howard Eales, Des Moines; second, Ella Plummer, Des Moines.

Peach ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Howard Eales, Des Moines.

Pear ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Plum ($2, $1)—First, Mrs. Lydia Viers, Des Moines; second, Mrs. Seward Long, Burlington.

Quince ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, E. L. Thompson, Des Moines.

Tomato ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. Chas. Arnold, Des Moines.

Watermelon ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, R. L. Thompson, Des Moines.

Pineapple ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Red Raspberry ($2, $1)—First, Ella Plummer, Des Moines; second, Elias Reynolds, Mitchellville.

JELLIES

Apple ($2, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Black Raspberry ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Blackberry ($2, $1)—First, B. Freel & Son, Pleasantville; second, Mrs M. Kastberg, Des Moines.

Crabapple ($2, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs J. A. Peters, Ankeny.

Cherry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Harriet Young, Des Moines.

Currant, White ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

Currant, Red ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

Cranberry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs K. C. Kastberg, Des Moines.

Gooseberry ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Haw, Red ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Grape, Dark ($2, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Geo. Grinstead, Des Moines.

Grape, White ($2, $1)—First, Mrs. J. A. Green, Beech; second, Mrs. M. Kastberg, Des Moines.

Grape, Wild ($2, $1)—First, Ina Morton, Indianola; second, Mrs. M. Kastberg, Des Moines.

Pineapple ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Peach ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. K. C. Kastberg, Des Moines.

Pear ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Plum ($2, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Quince ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Rhubarb ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, Mrs M. Kastberg, Des Moines.

Red Raspberry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Strawberry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

BUTTERS

Apple ($2, $1)—First, Mrs. Cassie Swallow, Valley Junction; second, Ella Plummer, Des Moines.

Black Raspberry ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. B. M. Reynolds, Mitchellville.

Cherry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Crabapple ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Currant ($2, $1)—First, Mrs. M. Kastberg; second, Mrs. K. C. Kastberg, Des Moines.

Gooseberry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Grape, Tame ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. B. M. Reynolds, Mitchellville.

Grape, Wild ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Peach ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Plum ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Agnes Ellis, Adelphi.

Pineapple ($2, $1)—First, Mrs. G. W. Parsons, Carlisle; second, Mrs. M. Kastberg, Des Moines.

Quince ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, E. L. Thompson, Des Moines.

Red Raspberry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Harnagel, Des Moines.

Rhubarb ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. Howard Eales, Des Moines.

Strawberry ($2, $1)—First, Mrs. K. C. Kastberg, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

JAMS

Apple ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Seward Long, Burlington.

Black Raspberry ($2, $1)—First, Blanche Van Gorpe, Mitchellville; second, Mrs. John C. Ash, Des Moines.

Cranberry ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Blackberry ($2, $1)—First, Mrs. Cassie Swallow, Valley Junction; second, Mrs. B. M. Reynolds, Mitchellville.

Crabapple ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. K. C. Kastberg, Des Moines.

Currant ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Margaret McNerney, Des Moines.

Gooseberry ($2, $1)—First, Mrs. Chas. Arnold, Des Moines; second, Ella Plummer, Des Moines.

Pineapple ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

Peach ($2, $1)—First, Ella Plummer, Des Moines; second, Mrs. Howard Eales, Des Moines.

Pear ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Howard Eales, Des Moines.

Plum ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Ella Plummer, Des Moines.

Strawberry ($2, $1)—First, Mrs. Clarence Alexander, Adelphi; second, Mrs. Sam Freel, Runnells.

Quince ($2, $1)—First, R. L. Thompson, Des Moines; second, E. L. Thompson, Des Moines.

Tomato ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. M. Kastberg, Des Moines.

SOUR PICKLES, CATSUP AND VINEGAR

Beet ($2, $1)—First, Mrs. Seward Long, Burlington; second, Mrs. Geo. Grinstead, Mitchellville.

Bean ($2, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Blanche Gorpe, Mitchellville.

Cucumber ($2, $1)—First, Mrs. A. L. Van Trump, Des Moines; second, Margaret McNerney, Des Moines.

Mango ($2, $1)—First, E. L. Thompson, Des Moines; second, Mrs. W. W. Preston, Carlisle.

Onion ($2, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. C. C. McGrew, Des Monies.

Tomato ($2, $1)—First, Mrs. F. H. Sinclair, Des Moines; second, Mrs. Seward Long, Burlington.

Mixed ($2, $1)—First, Ella Plummer, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Chow Chow ($2, $1)—First, Ella Plummer, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Piccalilli ($2, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. J. M. Henderson, Des Moines.

Chili Sauce ($2, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Ferne Botsford, Des Moines.

Tomato Catsup ($2, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Cucumber Catsup ($2)—First, Mrs. Geo. Grinstead, Mitchellville.

Homemade Cider Vinegar ($2, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. M. Kastberg, Des Moines.

CANNED FRUITS, SPICED GOODS AND SWEET PICKLES

Apple ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Frank E. Huston, Waukee.

Apricot ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. A. L. Van Trump, Des Moines.

Blackberries ($1.50, $1)—First, Mrs. Frank E. Huston, Waukee; second, Mrs. B. M. Reynolds, Mitchellville.

Cherries ($1.50, $1)—First, Ella Plummer, Des Moines; second, Mrs. Seward Long, Burlington.

Crabapples ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Currants, White ($1.50)—First, Mrs. C. C. McGrew, Des Moines.

Currants, Red ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Seward Long, Burlington.

Gooseberries ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, G. A. Newkirk, Des Moines.

Grapes, White ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Ella Plummer, Des Moines.

Grapes, Blue ($1.50, $1)—First, Mrs. Howard Eales, Des Moines; second, Ella Plummer, Des Moines.

Ground Cherries ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, Mrs. C. C. McGrew, Des Moines.

Peaches ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Pears ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. A. A. Johnson, Gladbrook.

Plums ($1.50, $1)—First, Mina Singmaster, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

Raspberries, Red ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Blanche Van Gorpe, Mitchellville.

Raspberries, Black ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Blanche Van Gorpe, Mitchellville.

Rhubarb ($1.50, $1)—First, Mrs. B. M. Reynolds, Mitchellville; second, Mrs. C. C. McGrew, Des Moines.

Strawberries ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, Mrs. L. M. Stuart, Des Moines.

SPICED GOODS

Apple ($1.50, $1)—First, Mrs. W. W. Preston, Carlisle; second, Mrs. Geo. Grinstead, Mitchellville.

Cherries ($1.50, $1)—First, Mrs. Wilfred Granquist, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

Currants ($1.50, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

Gooseberries ($1.50, $1)—First, Ella Plummer, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Peach ($1.50, $1)—First, Mrs. F. H. Sinclair, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Pear ($1.50, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Plum ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

SWEET PICKLES

Apple ($1.50, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. M. Kastberg, Des Moines.

Citron ($1.50, $1)—First, E. L. Thompson, Des Moines; second, R. L. Thompson, Des Moines.

Crabapple ($1.50, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. L. W. Stuart, Des Moines.

Cucumber ($1.50, $1)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. R. D. Kaufmann, Des Moines.

Peach ($1.50, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

Pear ($1.50, $1)—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Watermelon ($1.50, $1)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. E. L. Thompson, Des Moines.

Mixed ($1.50, $1)—First, Mrs. Howard Eales, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

CANNED VEGETABLES

Corn ($1.50, $1)—First, Mrs. Frank E. Huston, Waukee; second, Esther McGrath, Des Moines.

String Beans ($1.50, $1)—First, Mrs. M. J. Proudfit, Runnells; second, Mrs. Asa Lee, Mitchellville.

Shelled Beans ($1.50, $1)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. W. W. Preston, Carlisle.

Peas ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, Mrs. M. J. Proudfit, Runnells.

Beets ($1.50, $1)—First, Mrs. F. H. Sinclair, Des Moines; second, Mrs. Seward Long, Burlington.

Spinach ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, Mrs. C. C. McGrew, Des Moines.

Other Greens ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, Margaret McNerney, Des Moines.

Asparagus ($1.50, $1)—First, Esther McGrath, Des Moines; second, Mrs. J. L. Hamilton, Lucas.

Tomatoes ($1.50, $1)—First, Mrs. Chas. Walter, Altoona; second, Mrs. A. L. Van Trump, Des Moines.

Young Carrots ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, Nadeina Freel, Pleasantville.

Mixed Vegetables, for Soup ($1.50, $1)—First, Mrs. Seward Long, Burlington; second, Mrs. A. A. Johnson, Gladbrook.

Pumpkin, for Pies ($1.50, $1)—First, Mrs. Geo. B. Brockett, Runnells; second, Mrs. M. J. Proudfit, Runnells.

CANNED MEAT

Chicken ($2, $1)—First, Pearl Farrell, Ankeny; second, Mrs. Jesse Alexander, Indianola.

Beef ($2, $1)—First, Agnes Ellis, Adelphi; second, Mrs. Jesse Alexander, Indianola.

Rabbit ($2, $1)—First, Mrs. Seward Long, Burlington; second, Agnes Ellis, Adelphi.

Sausage ($2, $1)—First, Mrs. Jesse Alexander, Indianola; second, Agnes Ellis, Adelphi.

Fish ($2)—First, Mrs. Jesse Alexander, Indianola.

HONEY, BEES, ETC.

Three 24-Section Cases of White Honey, White Clover, Basswood, Sweet Clover ($25, $12, $10, $8)—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames; fourth, F. H. Stacey, Iowa Falls.

Three Hundred-pound Exhibit of Comb Honey, Quality, Manner of Preparation From Market Standpoint Considered ($25, $12, $10)—First, Eunice Longworth, Ames; second, R. H. Longworth, Ames; third, Bert A. Brown, Des Moines.

Twenty-four-pound Display of Comb Honey Showing Stand Market Grades ($15, $8, $5)—First, Mrs. L. W. Stuart, Des Moines; second, Bert A. Brown, Des Moines; third, R. H. Longworth, Ames.

Seventy-two Pounds of Light Extracted Honey, White Clover, Basswood, Sweet Clover in 1-pound Containers ($25, $12, $10, $7, $5)—First, Eunice Longworth, Ames; second, F. H. Stacey, Iowa Falls; third, R. H. Longworth, Ames; fourth, Bert A. Brown, Des Moines; fifth, W. F. Clements, Agency.

Three Hundred-pound Exhibit of Extracted Honey, Quality and Manner of Market Preparation Considered ($25)—First, Bert A. Brown, Des Moines.

Twenty-four-pound Display of Extracted Honey, Showing Standard Market Grades in 1-pound Containers ($15, $8, $5, $3)—First, F. H. Stacey, Iowa Falls; second, Bert A. Brown, Des Moines; third, R. H. Longworth, Ames; fourth, Eunice Longworth, Ames.

Twelve Pounds or More, Granulated Extracted Honey ($10, $5, $3, $2)—First, R. H. Longworth, Ames; second, F. H. Stacey, Iowa Falls; third, Eunice Longworth, Ames; fourth, Bert A. Brown, Des Moines.

Five Gallons Honey Vinegar ($10, $5, $3, $2, $1)—First, Eunice Longworth, Ames; second, Agnes Ellis, Adelphi; third, D. W. Ellis, Adelphi; fourth, F. H. Stacey, Iowa Falls; fifth, R. H. Longworth, Ames.

Display of Labeled Samples of Extracted Honey, Not Less Than One-half Pound Each ($10, $5, $3, $2)—First, F. H. Stacey, Iowa Falls; second, Bert A. Brown; third, R. H. Longworth, Ames; fourth, Eunice Longworth, Ames.

Best Display of Beeswax, Showing Color, Grades, Designs, With Labels ($10, $5, $3, $2, $1)—First, F. H. Stacey, Iowa Falls; second, Bert A. Brown, Des Moines; third, R. H. Longworth, Ames; fourth, Eunice Longworth, Ames; fifth, W. F. Clements, Agency.

Display Cooking, Honey Used Instead of Sugar ($10, $5, $3, $2)—First, F. H. Stacey, Iowa Falls; second, Bert A. Brown, Des Moines; third, Eunice Longworth, Ames; fourth, R. H. Longworth, Ames.

One 1-Frame Observation Hive of 3-band Italian Bees and Queen ($10, $5, $3, $2, $1)—First, F. H. Stacey, Iowa Falls; second, W. F. Clements, Agency; third, Bert A. Brown, Des Moines; fourth, R. H. Longworth, Ames; fifth, Eunice Longworth, Ames.

ASSOCIATIONS

County Beekeepers' Association Exhibit ($45, $25)—First, F. H. Stacey, Iowa Falls; second, W. F. Clements, Agency.

SWEEPSTAKES

Largest and Most Attractive Exhibit in This Department ($40, $20, $12)—First, Bert A. Brown, Des Moines; second, Eunice Longworth, Ames; third, R. H. Longworth, Ames.

CREAMERY BUTTER

SUPERINTENDENT......................R. G. CLARK, Des Moines, Iowa.
JUDGES.......................................ROY SCOLES, F. L. ODELL.

Highest Scoring Exhibit of Whole Milk Butter ($25)—First, Henry Segebarth, Fairbank.

Highest Scoring Exhibit of Gathered Cream Butter ($25)—First, E. O. Ballman, McGregor.

DAIRY BUTTER

Ten-pound Tub, Pro Rata ($60.00, $20.87, $15.65, $13.04, $10.44)—First, Kate Adamson, Ankeny; second, Mrs. J. L. Hamilton, Lucas; third, Mrs. L. F. Randolph, Ankeny; fourth, Mrs. J. A. Peters, Ankeny.

Sweepstakes ($5, $2)—First, Kate Adamson, Ankeny; second, Mrs. J. L. Hamilton, Lucas.

CHEESE

Best Exhibit of Cheese, Each Exhibit to Consist of Not Less Than Twenty Pounds Respectively ($25, $15, $10, $5)—First, L. J. Breher, Sheboygan Falls; second, L. J. Breher, Sheboygan Falls; third, Otto W. Sixel, Cleveland, Wis.; fourth, Louis J. Horn, Conrath, Wis.

FRUIT DEPARTMENT

PLATES APPLES FROM NORTHERN DISTRICT

SUPERINTENDENT........................EARL FERRIS, Hampton, Iowa.
JUDGE....................................C. S. HOLLAND.

Premiums on Each Variety ($1.50, $1, 50 cents)—**Annison**—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union. **Black Annette**—First, C. H. True; second, O. O. Lomen. **Charlamof**—First, C. H. True. **Delicious**—First, C. H. True. **Duchess**—First, C. H. True; second, P. M. Peterson, Cherokee; third, O. O. Lomen. **Eastman**—First, C. H. True; second, O. O. Lomen. **Fameuse**—First, C. H. True; second, O. O. Lomen; third, P. M. Peterson. **Gano**—First, C H. True; second, O. O. Lomen. **Golden Russet**—First, O. O. Lomen; second, P. M. Peterson; third, Isaac Johnson. **Hibernal**—First, P. M. Peterson; second, Isaac Johnson; third, O. O. Lomen. **Iowa Blush**—First, C. H. True; second, P. M. Peterson; third, O. O. Lomen. **Jonathan**—First, C. H. True. **Longfield**—First, O. O. Lomen. **Malinda**—First, C. H. True; second, P. M. Peterson; third, O. O. Lomen. **McIntoch**—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson. **N. W. Greening**—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson. **Patten's Greening**—First, O. O. Lomen; second, C. H. True; third, P. M. Peterson. **Pewaukee**—First, O. O. Lomen; Plum Cider, C. H. True. **Salome**—First, C. H. True; second, O. O. Lomen. **Tolman Sweet**—First, C. H. True; second, O. O. Lomen; third, P. M. Peterson. **Wealthy**—First, O. O. Lomen; second, C. H. True; third, P. M. Peterson. **Windsor**—First, C. H. True. **Wold River**—First, O. O. Lomen; second, C. H. True **Yellow Transparent**—First, C. H. True; second, O. O. Lmoen; third, P. M. Peterson. **Optional—St. Lawrence Class**—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson. **Okabena**—First, O. O. Lomen; second, C. H. True; third, P. M. Peterson. **Ben Davis**—First, C. H. True; second, P. M. Peterson; third, O. O. Lomen. **Mann**—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson. **Roman Stem**—First, C. H. True; second, P. M. Peterson; third, O. O. Lomen. **McMahon**—First, O. O. Lomen; second, C. H. True; third, P. M. Peterson. **Scotts Winter**—First, C. H. True; second, O. O. Lomen; third, P. M. Peterson. **Walbridge**—First, P. M. Peterson; second, O. O. Lomen; third, C. H. True. **Mammoth Black Twig**—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson. **Kompf**—First, P. M. Peterson; second, C. H. True; third, O. O. Lomen.

PLATES APPLES FROM CENTRAL DISTRICT

JUDGE................................H. E. NICHOLS, Ames, Iowa.

Premiums on Each Variety ($1.50, $1, 50 cents)—**Ben Davis**—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, W. E. Utterback, Sigourney. **Benoni**—First, E. O. Worth; second, M. J. Worth. **Chenango**—First, E. O. Worth; second, M. J. Worth. **Delicious**—First, E. O. Worth; second, M. J. Worth; third, Chas. M. L. Clemons, Davenport. **Duchess**—First, M. J. Worth; second, B. H. Beane, Le Grand. **Dyer**—First, E. O. Worth; second, M. J. Worth. **Esopus S.**—First, M. J. Worth; second, E. O. Worth. **Fameuse**—First, M. J. Worth; second, E. O. Worth; third, B. H. Beane. **Gano**—First, M. J. Worth; second, E. O. Worth; third, D. D. Hamilton. **Grimes**—First, E. O. Worth; second, M. J. Worth; third, W. E. Utterback. **Jonathan**—First, M. J. Worth; second, E. O. Worth; third, L. C. Knudson, Le Grand. **Lowell**—First, M. J. Worth; second, E. O. Worth; third, D. D. Hamilton. **Maiden Blush**—First, E. O. Worth; second, M. J. Worth; third, L. C. Knudson. **M. Black Twig**—First, M. J. Worth; second, W. E. Utterback; third, E. O. Worth. **McMahon**—First, E. O. Worth; second, D. D. Hamilton; third, M. J. Worth. **Minkler**—First, M. J. Worth; second, E. O. Worth; third, N. F. Ambrose, McCallsburg. **Mo. Pippin**—First, M. J. Worth; second, E. O. Worth. **N. W. Greening**—First, L. C. Knudson; second, M. J. Worth; third, W. E. Utterback. **Perry Russett**—First, E. O. Worth; second, D. D. Hamilton. **Rolls**—First, B. H. Beane;

second, E. O. Worth; third, M. J. Worth. **Rome Beauty**—First, M. J. Worth; second, E. O. Worth. **Salome**—First, L. C. Knudson; second, E. O. Worth; third, M. J. Worth. **Senator**—First, M. J. Worth; second, E. O. Worth. **Stagman**—First, M. J. Worth; second, E. O. Worth; third, Chas. M. L. Clemons. **Talman Sweet**—First, M. J. Worth; second, E. O. Worth; third, L. C. Knudson. **Wagner**—First, E. O. Worth; second, M. J. Worth. **Wealthy**—First, M. J. Worth; second, B. H. Beane; third, E. O. Worth. **Winesap**—First, M. J. Worth; second, E. O. Worth; third, L. C. Knudson. **Wolf River**—First, M. J. Worth; second, E. O. Worth; third, W. E. Utterback. **York**—First, E. O. Worth; second, M. J. Worth; third, D. D. Hamilton. **Optional—Pound—Sweet**—First, E. O. Worth; second, M. J. Worth; third, W. E. Utterback. **Isham Sweet**—First, M. J. Worth; second, L. C. Knudson; third, E. O. Worth. **Huntsman**—First, M. J. Worth; second, E. O. Worth; third, B. H. Beane. **King David**—First, M. J. Worth; second, L. C. Knudson; third, E. O. Worth. **Cole's Quince**—First, N. F. Ambrose; second, M. J. Worth; third, E. O. Worth. **Rambo**—First, E. O. Worth; second, M. J. Worth; third, L. C. Knudson. **Yellow Transparent**—First, M. J. Worth; second, B. H. Beane; third, E. O. Worth. **Winter Banana**—First, L. C. Knudson; second, M. J. Worth; third, E. O. Worth. **Windsor Chief**—First, M. J. Worth; second, E. O. Worth; third, L. C. Knudson. **Haas**—First, B. H. Beane; second, M. J. Worth; third, E. O. Worth.

PLATES APPLES FROM CAPITAL DISTRICT

JUDGE.......................................W. J. KOCHEN.

Premiums on Each Variety ($1.50, $1, 50 cents)—**Ben Davis**—First, Apple Grove Orchard, Mitchellville; second, Cyrus E. Harvey, Altoona; third, Chas. O. Garrett, Des Moines. **Benoni**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, The Harvey Nursery, Altoona. **Chenango**—First, The Harvey Nursery; second, Cyrus E. Harvey; third, Chas. O. Garrett. **Delicious**—First, L. C. Brown, Des Moines; second, Chas. O. Garrett; third, Cyrus E. Harvey. **Duchess**—First, Cyrus E. Harvey; second, Chas. O. Garrett; third, Mrs. V. M. Brazelton, Ankeny. **Dyer**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, The Harvey Nursery. **Fameuse**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Chas. O. Garrett. **Gano**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Chas. O. Garrett. **Grimes**—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, Chas. O. Garrett. **Jonathan**—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, Ella Plummer, Des Moines. **Longfield**—First, Cyrus E. Harvey; second, Chas. O. Garrett; third, The Harvey Nursery. **Lowell**—First, Chas. O. Garrett; second, Mrs. V. M. Brazelton; third, Cyrus E. Harvey. **Maiden Blush**—First, Chas. O. Garrett; second, Ella Plummer; third, Cyrus E. Harvey. **M. Black Twig**—First, Chas. O. Garrett; second, Apple Grove Orchard; third, Cyrus E. Harvey. **McMahon**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Ella Plummer. **Minkler**—First, Chas. O. Garrett; second, The Harvey Nursery; third, Cyrus E. Harvey. **N. W. Greening**—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, J. W. Pearson, Mitchellville. **Price Sweet**—First, Cyrus E. Harvey; second, Apple Grove Orchard; third, Ella Plummer. **Red June**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, The Harvey Nursery. **Rome Beauty**—First, Chas. O. Garrett; second, Ella Plummer. **Roman Stem**—First, Ella Plummer; Second, Chas. O. Garrett; third, Cyrus E. Harvey. **Salome**—First, The Harvey Nursery; second, Cyrus E. Harvey; third, Chas. O. Garrett. **Senator**—First, Apple Grove Orchard; second, Chas. O. Garrett. **Stayman**—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, The Harvey Nursery. **Willow Twig**—First, Ella Plummer; second, The Harvey Nursery; third, Chas. O. Garrett. **Yellow Transparent**—First, Cyrus E. Harvey; second, Chas. O. Garrett; third, The Harvey Nursery. **Wealthy**—First, Apple Grove Orchard; second, Chas. O. Garrett; third, Cyrus E. Harvey. **Winesap**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, J. W. Pearson. **Wolf River**—First, The Harvey Nursery; second, Cyrus E. Harvey; third, Chas. O. Garrett. **York**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, Ella Plummer. **Optional—Pewaukee**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Chas. O. Garrett. **Cole's Quince**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, Ella Plummer. **Utter's Red**—First, Apple Grove Orchard; second, Chas. O. Garrett; third, Cyrus E. Harvey. **King David**—First, Chas. O. Garrett; second, The Harvey Nursery; third, Apple Grove Orchard. **Fulton**—First, Chas. O. Garrett; second, The Harvey Nursery; third, Ella Plummer. **Flory**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Apple Grove Orchard. **Domine & Ralls**—First, The Harvey Nursery; second, J. W. Pearson; third, Mrs. W. J. Porter, Ankeny. **Hass**—First, Cyrus E. Harvey; second, Chas. O. Garrett; third, C. S. Jordon, Valley Junction. **Cox's Sweet**—First, J. W. Pearson; second, Ella Plummer; third, Apple Grove Orchard. **Black King**—First, Chas. O. Garrett; second, Apple Grove Orchard; third, J. W. Pearson.

PLATES APPLES FROM SOUTHERN DISTRICT

JUDGE..H. E. NICHOLS.

Premiums on Each Variety ($1.50, $1, 50 cents)—**Ben Davis**—First, A. R. Soder, Hartford; second, Geo. A. Schurk, Ft. Madison; third, Thos. Enright, Patterson. **Benoni**—First, A. R. Soder; second, W. F. Clements, Agency; third, Geo. A. Schurk. **Chenango**—First, A. R. Soder; second, Thos. Enright; third, F. L. Overley, Indianola. **Delicious**—First, Thos. Enright; second, Geo. A. Schurk; third, Wm. Landis, Peru. **Duchess**—First, A. R. Soder; second, W. F. Clements; third, Geo. A. Schurk. **Dyer**—First, Thos. Enright. **Fameuse**—First, Thos. Enright; second, Geo. A. Schurk. **Grimes**—First, A. R. Soder; second, Geo. A. Schurk; third, Thos. Enright. **Iowa Blush**—First, Thos. Enright; second, A. R. Soder. **Jonathan**—First, A. R. Soder; second, Geo. A. Schurk; third, W. F. Clements. **King David**—First, A. R. Soder; second, F. L. Overley; third, Thos. Enright. **Lowell**—First, A. R. Soder; second, Mrs. Howard Eales, Des Moines. **Maiden Blush**—First, Geo. A. Schurk; second, A. R. Soder; third, Thos. Enright. **M. Black Twig**—First, Geo. A. Schurk; second, A. R. Soder; third, Thos. Enright. **McMahon**—First, Thos. Enright. **Minkler**—First, A. R. Soder; second, Thos. Enright. **N. W. Greening**—First, Thos. Enright; second, Geo. A. Schurk; third, A. R. Soder. **Prices' Sweet**—First, A. R. Soder; second, Thos. Enright. **Ralls**—First, Thos. Enright; second, A. R. Soder; third, Geo. A. Schurk. **Roman Stem**—First, A. R. Soder; second, F. L. Overley; third, Thos. Enright. **Salome**—First, A. R. Soder; second, Thos. Enright; third, Geo. A. Schurk. **Tolman Sweet**—First, A. R. Soder; second, Thos. Enright. **Utters Red**—First, A. R. Soder; second, Thos. Enright. **Wealthy**—First, Thos. Enright; second, A. R. Soder; third, Wm. Landis. **Willow Twig**—First, Geo. A. Schurk; second, Thos. Enright. **Winesap**—First, Geo. A. Schurk; second, Thos. Enright; third, A. R. Soder. **Wolf River**—First, Geo. A. Schurk; second, Thos. Enright; third, E. W. Kibler, Agency. **Yellow Transparent**—First, A. R. Soder; second, Thos. Enright; third, Geo. A. Schurk. **York**—First, Thos. Enright; second, A. R. Soder; third, Geo. A. Schurk. **Optional—Stayman**—First, Geo. A. Schurk; second, A. R. Soder; third, Thos. Enright. **Ingram**—First, A. R. Soder; second, Geo. A. Schurk. **Barley**—First, Geo. A. Schurk; second, Thos. Enright; third, J. E. Grant, Carlisle. **Ramsdale**—First, Thos. Enright; second, A. R. Soder; third, Wib Clement, Agency. **Perry Russet**—First, Thos. Enright; second, Geo. A. Schurk; third, A. R. Soder. **Gano**—First, Thos. Enright; second, Geo. A. Schurk; third, W. F. Clement. **Chicago**—First, Geo. A. Schurk; second, A. R. Soder; third, Thos. Eright. **Flory**—First, Geo. A. Schurk; second, Thos. Enright; third, A. R. Soder. **Rome Beauty**—First, Geo. A. Schurk; second, A. R. Soder; third, Thos. Enright. **Red June**—First, Thos. Enright; second, Geo. A. Schurk; third, A. R. Soder.

APPLES HOME ORCHARD COLLECTION

JUDGE..H. E. NICHOLS.

Northern District ($8, $5, $4, $3)—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee; fourth, Isaac Johnson, West Union.

Central District ($8, $5, $4, $3, $2)—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, L. C. Knudson, Le Grand; fourth, B. H. Beane, Le Grand; fifth, N. F. Ambrose, McCallsburg.

Capital District ($8, $5, $4, $3, $2)—First, Cyrus E. Harvey, Altoona; second, Chas. O. Garrett, Des Moines; third, Apple Grove Orchard, Mitchellville; fourth, Mrs. V. M. Brazelton, Ankeny; fifth, The Harvey Nursery, Altoona.

Southern District ($8, $5, $4)—First, Thos. Enright, Patterson; second, Geo. A. Schurk, Ft. Madison; third, A. R. Soder, Hartford.

APPLE COLLECTIONS FROM NORTHERN DISTRICT

JUDGE..C. S. HOLLAND.

Collection Not Less Than 20 Varieties or More Than 50 ($35, $25, $15, $10) First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union; fourth, P. M. Peterson, Cherokee.

Four Varieties, Summer ($5, $4, $3, $2)—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson; fourth, P. M. Peterson.

Six Varieties, Fall ($5, $4, $3, $2)—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson; fourth, P. M. Peterson.

Six Varieties, Winter ($5, $4, $3, $2)—First, C. H. True; second, O. O. Lomen; third, Isaac Johnson; fourth, P. M. Peterson.

APPLE COLLECTIONS FROM CENTRAL DISTRICT

JUDGE..W. J. KOCKEN.

Collection Not Less Than 20 Varieties or More Than 50 ($35, $25, $15, $10, $5)—First, E. O. Worth, Mondamin; second, M. J, Worth, Mondamin; third, Chas. M. L. Clemons, Davenport; fourth, N. F. Ambrose, McCallsburg; fifth, D. D. Hamilton, Morning Sun.

Four Varieties, Summer ($5, $4, $3, $2, $1)—First, E. O. Worth; second, M. J. Worth; third, Chas. M. L. Clemons; fourth, N. F. Ambrose; fifth, D. D. Hamilton.

Six Varieties, Fall ($5, $4, $3, $2, $1)—First, E. O. Worth; second, M. J. Worth; third, Chas. M. L. Clemons; fourth, N. F. Ambrose; fifth, D. D. Hamilton.

Six Varieties, Winter ($5, $4, $3, $2, $1)—First, E. O. Worth; second, M. J. Worth; third, L. C. Knudson, Le Grand; fourth, B. H. Beane, Le Grand; fifth, N. B. Ambrose.

APPLE COLLECTIONS FROM CAPITAL DISTRICT

JUDGE..W. J. KOCKEN.

Collection, Not Less Than 20 Varieties or More Than 50 ($35, $25, $15, $10, $5)—First, Chas. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, Ella Plummer, Des Moines; fourth, The Harvey Nursery, Altoona; fifth, Apple Grove Orchard, Mitchellville.

Four Varieties, Summer ($5, $4, $3, $2, $1)—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Chas. O. Garrett; fourth, Ella Plummer; fifth, Apple Grove Orchard.

Six Varieties, Fall ($5, $4, $3, $2, $1)—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, Ella Plummer; fourth, Apple Grove Orchard; fifth, The Harvey Nursery.

Six Varieties, Winter ($5, $4, $3, $2, $1)—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, Chas. O. Garrett; fourth, The Harvey Nursery; fifth, Ella Plummer.

APPLE COLLECTIONS FROM SOUTHERN DISTRICT

JUDGE..H. E. NICHOLS.

Collection, Not Less Than 20 Varieties or More Than 50 ($35, $25, $15)—First, A. R. Soder, Hartford; second, Thos. Enright, Patterson; third, Geo. A. Schurk, Ft. Madison.

Four Varieties, Summer ($5, $4)—First, A. R. Soder; second, Thos. Enright.

Six Varieties, Fall ($5, $4)—First, A. R. Soder; second, Thos. Enright.

Six Varieties, Winter ($5, $4, $3)—First, Thos. Enright; second, A. R. Soder; third, Geo. A. Schurk.

APPLES IN TRAYS

JUDGE..W. J. KOCKEN.

Northern District ($5, $3, $2)—**Duchess**—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee. **Wealthy**—First, C. H. True; second, O. O. Lomen; third, P. M. Peterson. **N. W. Greening**—First, C. H. True; second, O. O. Lomen. **Fameuse**—First, C. H. True; second, O. O. Lomen. **Malinda**—First, C. H. True; second, P. M. Peterson. **Tolman Sweet**—First, C. H. True. **Wolf River**—First, O. O. Lomen. **Optional**—First, C. H. True; second, O. O. Lomen. **Optional**—First, O. O. Lomen; second, P. M. Peterson.

Central District ($5, $3, $2)—**Duchess**—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, Chas. F. Clemons, Davenport. **Wealthy**—First, E. O. Worth; second, M. J. Worth. **Maiden Blush**—First, M. J. Worth; second, E. O. Worth; third, Chas. F .Clemons. **Delicious**—First, M. J. Worth; second, E. O. Worth. **Grimes**—First, M. J. Worth; second, E. O. Worth. **Jonathan**—First, E. O. Worth; second, M. J. Worth; third, Chas. F. Clemons. **N. W. Greening**—First, M. J. Worth; second, E. O. Worth; third, Chas. F. Clemons. **Optional**—First, M. J. Worth; second, E. O. Worth; third, Chas. F. Clemons. **Optional**—First, M. J. Worth; second, E. O. Worth; third, Chas. F. Clemons. **Optional**—First, M. J. Worth; second, E. O. Worth; third, Chas. F. Clemons.

Capital District ($5, $3, $2, $1)—**Duchess**—First, Chas. O. Garrett, Des Moines; second, The Harvey Nursery, Altoona; third, Cyrus E. Harvey, Altoona. **Wealthy**—First, Chas. O. Garrett; second, Apple Grove Orchard, Mitchellville; third, Cyrus E. Harvey. **Maiden Blush**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, The Harvey Nursery. **N. W. Greening**—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, The Harvey Nursery. **Delicious**—First, Harvey Nursery; second, Cyrus E. Harvey. **Jonathan**—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, Chas. O. Garrett. **Grimes**—First, Apple Grove Orchard; second, Cyrus E. Harvey; third, Chas. O. Garrett. **Optional**—First, The Harvey Nursery; second, Chas. O. Garrett; third, Cyrus E. Harvey; fourth, Apple Grove Orchard. **Optional**—First, Cyrus E. Harvey; second, Chas. O. Garrett; third, Apple Grove Orchard; fourth, The Harvey Nursery. **Optional**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Apple Grove Orchard; fourth, Chas. O. Garrett.

Southern District ($5, $3, $2, $1)—**Duchess**—First, A. R. Soder, Hartford. **Wealthy**—First, Thos. Enright, Patterson. **Maiden Blush**—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright. **Delicious**—First, Geo. A. Schurk; second, Thos. Enright. **Grimes**—First, A. R. Soder; second, Geo. A. Schurk; third, Thos. Enright. **Jonathan**—First, Geo. A. Schurk; second, A. R. Soder; third, Thos. Enright. **Ben Davis**—First, Thos. Enright; second,

A. R. Soder. **Optional**—First, Geo. A. Schurk; second, Thos. Enright; third, A. R. Soder. **Optional**—First, Geo. A. Schurk; second, A. R. Soder; third, Thos. Enright. **Optional**—First, F. L. Overley, Indianola; second, Geo. A. Schurk; third, A. R. Soder.

TWENTY-FIVE PLATE DISPLAY

JUDGE..C. S. HOLLAND.

Northern District ($10, $8)—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah.

Central District ($10, $8, $5, $3, $2)—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, L. C. Knudson, Le Grand; fourth, Chas. M. L. Clemons, Davenport; fifth, D. D. Hamilton, Morning Sun.

Capital District ($10, $8, $5, $3)—First, Apple Grove Orchard, Mitchellville; second, Cyrus E. Harvey, Altoona; third, The Harvey Nursery, Altoona; fourth, Chas. O. Garrett, Des Moines.

Southern District ($10, $8, $5)—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, A. R. Soder, Hartford.

TEN PLATE DISPLAY

JUDGE..C. S. HOLLAND.

Best Ten Plates Wealthy ($10, $8, $4, $3, $2)—First, Chas. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, Apple Grove Orchard, Mitchellville; fourth, The Harvey Nursery, Altoona; fifth, H. H. Ban Bentheysen, Runnells.

Best Ten Plates Jonathan ($10, $8, $4, $3, $2, $1)—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, Apple Grove Orchard, Mitchellville; fourth, Geo. A. Schurk, Ft. Madison; fifth, The Harvey Nursery, Altoona; sixth, Cyrus E. Harvey, Altoona.

Best Ten Plate Exhibit Each of Three Other Varieties to be Selected ($10, $8, $4, $3, $2, $1)—**Grimes**—First, M. J. Worth, Mondamin; second, Apple Grove Orchard, Mitchellville; third, E. O. Worth, Mondamin; fourth, The Harvey Nursery, Altoona; fifth, Geo. A. Schurk, Ft. Madison; Chas. O. Garrett, Des Moines. **N. W. Greening**—First, Apple Grove Orchard, Mitchellville; second, Geo. A. Schurk, Ft. Madison; third, Cyrus E. Harvey, Altoona; fourth, Chas. O. Garrett, Des Moines; fifth, The Harvey Nursery, Altoona; sixth, Chas. M. L. Clemons, Davenport. **Delicious—Willow Twig**—First, M. J. Worth, Mondamin; second, Geo. A. Schurk, Ft. Madison; third, Chas. O. Garrett, Des Moines; fourth, Cyrus E. Harvey, Altoona; fifth, Apple Grove Orchard, Mitchellville; sixth, The Harvey Nursery, Altoona.

SWEEPSTAKES PLATES

Premiums on Each Variety ($5)—**Duchess**—First, Cyrus E. Harvey, Altoona. **Wealthy**—First, Apple Grove Orchard, Mitchellville. **Jonathan**—First, M. J. Worth, Mondamin. **Grimes**—First, E. O. Worth, Mondamin. **Delicious**—First, E. O. Worth, Mondamin. **N. W. Greening**—First, Apple Grove Orchard, Mitchellville. **Ben Davis**—First, M. J. Worth, Mondamin. **Stayman**—First, M. J. Worth, Mondamin. **Maiden Blush**—First, M. J. Worth, Mondamin. **Rambo**—First, E. O. Worth, Mondamin.

Grand Sweepstakes (Ribbon)—E. O. Worth, Mondamin.

CRABS

JUDGE..C. V. HOLSINGER.

Northern District ($1.50, $1, 50 cents)—**Whitney**—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, Mrs. E. J. J. Heise. **Hyslop**—First, C. H. True; second, P. M. Peterson. **Martha**—First, P. M. Peterson. **Transcendent**—First, P. M. Peterson. **Yellow Siberian**—First, P. M. Peterson. **Briers Sweet**—First, P. M. Peterson; second, C. H. True. **Florence**—First, C. H. True; second, O. O. Lomen. **Virginia**—First, C. H. True; second, P. M. Peterson; third, O. O. Lomen.

Central District ($1.50, $1, 50 cents)—**Whitney**—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin. **Martha**—First, M. J. Worth, Mondamin; second, E. O. Worth. **Transcendent**—First, Chas. F. L. Clemons, Davenport; second, E. O. Worth; third, M. J. Worth. **Florence**—First, E. O. Worth; second, M. J. Worth. **Virginia**—First, M. J. Worth; second, E. O. Worth. **Yellow Siberian**—First, Chas. F. L. Clemons. **Briers Sweet**—First, M. J. Worth; second, E. O. Worth.

Capital District ($1.50, $1, 50 cents)—**Whitney**—First, Harvey Nursery, Altoona; second, Cyrus E. Harvey, Altoona; third, Apple Grove Orchard, Mitchellville. **Hyslop**—First, Chas. O. Garrett, Des Moines; second, Cyrus E. Harvey; third, The Harvey Nursery. **Martha**—First, Cyrus E. Harvey; second, Ella Plummer. **Transcendent**—First, Chas. O. Garrett; second, Ella Plummer; third, L. C. Brown, Des Moines. **Yellow Siberian**—First, Cyrus E. Harvey; second, The Harvey Nursery. **Briers Sweet**—First, Chas. O. Garrett. **Snyder**—First, Cyrus E. Harvey; second, Mrs. V. M. Brazelton, Ankeny; third, The Harvey Nursery. **Florence**—First, Cyrus E. Harvey; second, The Harvey Nursery; third, Chas. O. Garrett.

Southern District ($1.50, $1, 50 cents)—**Whitney**—First, F. L. Overley, Indianola; second, Thos. Enright, Patterson; third, Mrs. John Kinzey, Milo. **Hyslop**—First, Thos. Enright; second, A. R. Soder, Hartford. **Martha**—First, Thos. Enright; second, E. K. Kibler, Ankeny. **Transcendent**—First, Thos. Enright. **Yellow Siberian**—First, W. F. Clements, Agency; second, Thos. Enright. **Briers Sweet**—First, Thos. Enright. **Optional—Virginia**—First, A. R. Soder; second, Thos. Enright; third, Gertie Englebrecht, Valley Junction. **Florence**—First, Thos. Enright; second, A. R. Soder.

PEARS

Judge..C. V. Holsinger.

Best and Largest Collection of Pears, Not Less Than Five Varieties ($15, $10, $5)—First, Geo. A. Schurk, Ft. Madison; second, Chas. O. Garrett, Des Moines; third, Chas. M. L. Clemmons, Davenport.

Premiums on Each Variety ($1.50, $1, 50 cents)—**Bartlett**—Second, Geo. A. Schurk, Ft. Madison; third, M. J. Worth, Mondamin. **Duchess**—First, Cyrus E. Harvey, Altoona; second, Clarence Wilbur, Ackworth; third, Chas. M. L. Clemons, Davenport. **Flemish Beauty**—First, M. J. Worth; second, Chas. O. Garrett. **Garber**—First, E. O. Worth second, M. J. Worth; third, Geo. A. Schurk. **Kieffer**—First, Cyrus E. Harvey; second, M. J. Worth; third, Geo. A. Schurk. **Lincoln**—First, M. J. Worth. **Seckel**—First, Clarence Wilbur; second, Geo. A. Schurk. **Sudduth**—First, F. L. Overley; second, A. R. Soder; third, Ella Plummer. **Hartford**—First, Chas. O. Garrett; second, Cyrus E. Harvey. **Vermont Beauty**—First, Chas. O. Garrett. **Howell**—First, Chas. O. Garrett; second, Geo. A. Schurk. **Bartlett Seckel**—First, Geo. A. Schurk. **Sheldon**—First, E. O. Worth; second, M. J. Worth. **Conjou**—First, Cyrus E. Harvey; second, Chas. O. Garrett; third, Chas. M. L. Clemons.

PEACHES

Judge..C. S. Holland.

SOUTHERN DISTRICT

Collection of Peaches Not Less Than Five Varieties ($10, $5, $2)—First, E. O. Worth, Mondamin; second, Chas. O. Garrett, Des Moines; third, Chas. M. L. Clemons, Davenport.

Plates, Worthy Varieties (Premium limited to five varieties. Seedlings may be entered, but must be of recognized value. Duplicate plates must be used for collections) ($1, 50 cents)—**Elberta**—First, M. J. Worth; second, E. O. Worth. **Champion Variety**—First, M. J. Worth; second, E. O. Worth. **Bokara Type**—First, Chas. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. **Early Crawford Variety**—First, Apple Grove Orchard, Mitchellville; second, J W. Pearson, Mitchellville. **Seedling No. 1**—First, Chas. M. L. Clemons; second, Apple Grove Orchard.

GRAPES

JUDGE..C. V. HOLSINGER.

NORTHERN DISTRICT

Best Collection and Largest Collection of Grapes, Not Less Than Five Varieties ($15, $10, $8)—First, C. H. True, Edgewood; second, Effie M. Backe, Hubbard; third, A. A. Lomen, Decorah.

Premiums on Each Variety ($1.50, $1, 50 cents)—**Agawan**—First, C. H. True; second, Effie M. Backe. **Beta**—First, Effie M. Backe; second, N. F. Ambrose. **Brighton**—First, C. H. True. **Concord**—First, C. H. True; second, Effie M. Backe; third, N. F. Ambrose. **Delaware**—First, C. H. True; **Eaton**—First, C. H. True, **Moore's Early**—First. C. H. True; second, Effie M. Backe. **Niagara**—First, C. H. True; second, J. F. Ambrose. **Woodruff Red**—First, C. H. True. **Worden**—First, C. H. True; second, Effie M. Backe. **Wyoming Red**—First, C. H. True. **Early Daisy**—First C. H. True. **Colorain**—First, C. H. True. **Ives**—First, C. H. True. **Wilder**—First, C. H. True.

SOUTHERN DISTRICT

Best and Largest Collection of Grapes, Not Less Than Five Varieties ($15, $10, $8, $5)—First, Chas. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, A. R. Soder, Hartford; fourth, Chas. F. L. Clemons, Davenport.

Premiums on Each Variety ($1.50, $1, 50 cents)—**Agawan**—First, Chas. O. Garrett; second, Mrs. W. M. Riley, Patterson; third, O. B. Pickering, Des Moines. **Brighton**—First, Cyrus E. Harvey; second, Chas. O. Garrett. **Concord**—First, William Allen, Des Moines; second, Cyrus E. Harvey; third, Mrs. W. M. Riley. **Delaware**—First, Chas. O. Garrett; second, Cyrus E. Harvey. **Lucile**—First, Chas. O. Garrett. **Moore's Early**—First, Mrs. W. M. Riley; second, Chas. O. Garrett; third, O. B. Pickering. **Moore's Diamond**—First, Mrs. W. M. Riley; second, Chas. O. Garrett; third, O. B. Pickering. **Niagara**—First, Cyrus E. Harvey; second, Chas. O. Garrett; third, Wm. Landis, Peru. **Pocklington**—First, Chas. O. Garrett. **Woodruff Red**—First, Chas. O. Garrett; second, Wm. Landis. **Worden**—First, Mrs. W. M. Riley; second, O. B. Pickering; third, Chas. O. Garrett. **Wyoming Red**—First, Mrs. W. M. Riley; second, O. B. Pickering; third, Chas. O. Garrett. **Optional—Elivira**—First, Mrs. W. M. Riley; second, O. B. Pickering; third, Chas. O. Garrett. **Banner**—First, Cyrus E. Harvey; second, Chas. O. Garrett. **Clingon—Bary**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, Chas. F. L. Clemons. **Champion Luttie**—First, Chas. O. Garrett; second, Cyrus E. Harvey; third, J. H. Comer, Des Moines. **American Unknown**—First, Chas. O. Garrett; second, Cyrus E. Harvey.

PLUMS

JUDGE..W. J. KOCKEN.

NORTHERN DISTRICT

Largest and Best Collection of Plums, Not Less Than 15 Varieties ($15, $10)—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union.

Premiums on Each Variety ($1, 50 cents)—**De Soto**—First, Isaac Johnson; second, O. O. Lomen. **Forest Garden**—First, Isaac Johnson; second, O. O. Lomen. **Hawkeye**—First, O. O. Lomen. **Hunt**—First, Isaac Johnson. **Miner**—First, C. H. True. **Stoddard**—First, O. O. Lomen. **Terry**—First, O. O. Lomen. **Waneta**—First, O. O. Lomen. **Wild Goose**—First, Isaac Johnson; second, O. O. Lomen. **Wolf**—First, S. F. Ambrose, McCallsburg; second, O. O. Lomen. **Waynett**—First, N. F. Ambrose; second, O. O. Lomen. **Surprise**—First, N. F. Ambrose; second, C. H. True. **Optional**—First, Isaac Johnson; second, O. O. Lomen. **Optional**—First, O. O. Lomen; second, Isaac Johnson. **Optional**—First, O. O. Lomen; second, Isaac Johnson. **Optional**—First, O. O. Lomen; second, Isaac Johnson.

Best Collection Domestic Plums, Not Less Than Five Varieties ($5)—First, O. O. Lomen, Decorah.

SOUTHERN DISTRICT

Largest and Best Collection of Plums, Not Less Than 15 Varieties ($15, $10, $8)—First, Cyrus E. Harvey, Altoona; second, Chas. O. Garrett, Des Moines; third, Chas. F. L. Clemons, Davenport.

Premiums on Each Variety ($1, 50 cents)—**Damson**—First, Cyrus E. Harvey; second, J. W. Pearson. **De Soto**—First, Cyrus E. Harvey; second, Chas. O. Garrett. **Forest Garden**—First, Cyrus E. Harvey; second, Chas. O. Garrett. **Hammer**—First, Cyrus E. Harvey; second, Chas. O. Garrett. **Hawkeye**—First, A. R. Llewellyn, Waukee; second, Cyrus E. Harvey. **Hunt**—First, Chas. O. Garrett. **Lombard**—First, Chas. O. Garrett; second, Cyrus E. Harvey. **Miner**—First, Chas. F. L. Clemons; second, J. W. Pearson. **Stoddard**—First, Chas. O. Garrett; second, Cyrus E. Harvey. **Terry**—First, Cyrus E. Harvey; second, Chas. O. Garrett. **Waneta**—First, Apple Grove Orchard; second, Cyrus E. Harvey. **Wild Goose**—First, Chas. O. Garrett; second, Cyrus E. Harvey. **Wolf**—First, Cyrus E. Harvey; second, Chas. O. Garrett. **Wyant**—First, W. E. Utterback, Sigourney; second, Chas. O. Garrett. **Optional**—First, J. W. Pearson; second, Cyrus E. Harvey. **Optional**—First, Chas. O. Garrett; second, Apple Grove Orchard. **Optional**—First, Cyrus E. Harvey; second, Chas. F. L. Clemons. **Optional**—First, Chas. O. Garrett; second, J. W. Pearson. **Optional**—First, J. W. Pearson; second, A. R. Soder. **Optional**—First, Chas. O. Garrett; second, D. D. Hamilton.

Best Collection Domestic Plums, Not Less Than Five Varieties ($5, $3)—First, Cyrus E. Harvey; second, Chas. O. Garrett.

Best Collection of Japan or Hybrid Plums, Not Less Than Three Varieties ($3, $2)—First, Cyrus E. Harvey; second, Apple Grove Orchard.

UNNAMED SEEDLING FRUITS

JUDGE..C. V. HOLSINGER.

Plate Seedling Apples, Six Specimens ($6, $5, $4, $3)—First, Cyrus E. Harvey, Altoona; second, N. F. Ambrose, McCallsburg; third, E. O. Worth, Mondamin; fourth, A. R. Soder, Hartford.

Plate Seedling Native Hybrid Crab, Ten Specimens ($1.50, $1, 50 cents)—First, Chas. O. Garrett, Des Moines; second, A. R. Soder, Hartford; third, Chas. F. L. Clemons, Davenport.

Plate Native Plum Seedling, Fifteen Specimens ($5, $4, $3, $2)—First, Chas. O. Garrett, Des Moines; second, J. W. Pearson, Mitchellville; third, Chas. O. Garrett, Des Moines; fourth, A. R. Soder, Hartford.

NATIVE FRUITS

JUDGE..C. S. HOLLAND.

Plates Elderberry ($1, 50 cents)—First, F. L. Overly, Indianola; second, J. L. Hamilton, Lucas.

Plates Juneberry ($1, 50 cents)—First, Cyrus E. Harvey, Altoona; second, Chas. O. Garrett, Des Moines.

Plates Fresh Strawberry Progressive ($1, 50 cents)—First, Wm. Allen, Des Moines; second, Cyrus E. Harvey, Altoona.

Plates Fresh Strawberry, Other Variety ($1)—First, S. D. Whinery, Des Moines.

Plates of Other Native Fruits, Limited to Five Kinds ($1, 50 cents)—**Wild Grapes**—First, E. A. Foster, Norwalk; second, S. D. Whinery, Des Moines. **Haws**—First, S. D. Whinery, Des Moines; second, Chas. F. L. Clemons, Davenport. **Wild Cherry**—First, S. D. Whinery, Des Moines; second, Chas. F. L. Clemons, Davenport. **Wild Crab Apples**—First, Chas. O. Garrett, Des Moines; second, S. D. Whinery, Des Moines. **Canned Wild Fruit**—First, S. D. Whinery, Des Moines.

Best Collection of Native Fruits ($5, $4, $3, $2)—First, S. D. Whinery, Des Moines; second, W. Clement, Agency; third, Cyrus E. Harvey, Altoona; fourth, Chas. F. L. Clemons, Davenport.

EDIBLE NUTS GROWN IN IOWA, NATIVE OR FOREIGN ORIGIN

JUDGE..W. J. KOCKEN.

Plates Black Walnut ($1, 50 cents)—First, Mrs. W. M. Riley, Patterson; second, Ella Plummer, Des Moines.

Plates White Walnut or Butternut ($1, 50 cents)—First, Mrs. C. C. Bierma, East Des Moines; second, Ella Plummer, Des Moines.

Plates Shell Bark Hickory Nut ($1, 50 cents)—First, Wib Clement, Agency; second, Ella Plummer, Des Moines.

Plates Hazlenut ($1, 50 cents)—First, S. D. Whinery, Des Moines; second, Walter Russell, Indianola.

Plates Sweet Chestnut ($1, 50 cents)—First, H. E. Spalti, Pleasantville; second, J. W. Pearson, Mitchellville.

Plates Pecan ($1)—First, Chas. O. Garrett, Des Moines.

Plates Peanuts (50 cents)—Second, Ella Plummer, Des Moines.

Plates of Other Nuts Grown in Iowa, Limited to Five Kinds ($1)—Almond—First, Odessa Porter Llewellyn, Waukee.

Best Collection of Nuts ($5)—First, S. D. Whinery, Des Moines.

GLADIOLI DISPLAY

SUPERINTENDENT..................................L. E. FOGLESONG.
JUDGE..T. O. SMEDLEY.

Best Collection of Named Varieties ($40, $30, $15)—First, Beebe & Tucker, Mitchellville; second, G. D. Black, Independence; third, Chas. J. Siemer, Nora Springs.

One Vase, Six Spikes, Le Marechal Foch ($5, $3, $1)—First, Beebe & Tucker; second, L. D. Strickler, Mitchellville; third, G. D. Black.

One Vase, Six Spikes, Mrs. Dr. Norton ($3)—Second, G. D. Black.

One Vase, Six Spikes, Mary Fennell ($5, $3, $1)—First, Beebe & Tucker; second, L. D. Strickler; third, Wm. Hester, Des Moines.

One Vase, Six Spikes, One Variety, White ($3, $2, $1)—First, Beebe & Tucker; second, L. D. Strickler; third, Chas. J. Siemer.

One Vase, Six Spikes, One Variety, Scarlet ($3, $2, $1)—First, Wm. Hester; second, Beebe & Tucker; third, G. D. Black.

One Vase, Six Spikes, One Variety, Blue-Reds ($3, $2, $1)—First, Chas. J. Seimer; second, G. D. Black; third, Wm. Hester.

One Vase, Six Spikes, One Variety, Light Pink ($3, $2, $1)—First, L. D. Strickler; second, Beebe & Tucker; third, Wm. Hester.

One Vase, Six Spikes, One Variety, Dark Pink ($3, $2, $1)—First, Chas. J. Seimer; second, G. D. Black; third, L. D. Strickler.

One Vase, Six Spikes, One Variety, Salmon ($3, $2, $1)—First, Beebe & Tucker; second, L. D. Strickler; third, G. D. Black.

One Vase, Six Spikes, One Variety, Yellow ($3, $2, $1)—First, Chas. J. Seimer; second, Wm. Hester; third, Beebe & Tucker.

One Vase, Six Spikes, One Variety, Purple ($3, $2, $1)—First, Wm. Hester; second, G. D. Black; third, Chas. J. Seimer.

One Vase, Six Spikes, One Variety, Lavender ($3, $2, $1)—First, G. D. Black; second, Chas. J. Seimer; third, Wm. Hester.

One Vase, Six Spikes, One Variety, Variegated ($3, $2)—First, Chas. J. Seimer; second, G. D. Black.

One Vase, Six Spikes, One Variety, Ruffled ($3, $2, $1)—First, G. D. Black; second, Beebe & Tucker; third, L. D. Strickler.

One Vase, Six Spikes, One Variety, Primulinus Hybrid ($2, $1)—Second, Chas. J. Seimer; third, G. D. Black.

One Vase, Six Spikes, New Variety ($3, $2, $1)—First, Beebe & Tucker; second, Chas. J. Seimer; third, G. D. Black.

SPECIAL PRIZES

One Vase, 25 Spikes, Mrs. Francis King ($10, $5)—First, Beebe & Tucker; second, L. D. Strickler.

One Vase, 12 Spikes, Louise ($3)—Second, G. D. Black.

Three Vases, Three Spikes Each, Three Named Varieties, Lavender or Blue ($1)—Third, G. D. Black.

Best Unnamed Seedling Gladiolus ($3, $2)—First, Chas. J. Seimer; second, Wm. Hestier.

One Vase, 12 Schwaben ($3, $2)—First, Beebe & Tucker; second, L. D. Strickler.

One Vase, 12 Spikes, Mary Fennell ($5, $3)—First, L. D. Strickler; second, G. D. Black.

One Vase, 12 Spikes, Gretchen Zang ($5, $3)—First, L. D. Strickler; second, G. D. Black.

Basket, 12 Spikes, Mixed Varieties ($5, $3, $2)—First, Beebe & Tucker; second, Chas. J. Seimer; third, G. D. Black.

TEXTILE AND CHINA DEPARTMENT

SUPERINTENDENT......................T. C. LEGOE, What Cheer, Iowa.
JUDGE..R. J. HESS.

HOUSEHOLD FABRICS, QUILTS, ETC.

Rug, Any Material ($3, $2, $1)—First, Mrs. Isaac Keller, Alleman; second, Mrs. John E. Ash, Des Moines; third, E. Heydon, Mitchellville.

Velvet Quilt ($3, $2, $1)—First, E. Heydon, Mitchellville; second, Miss Esther Seiberling, Mitchellville; third, Helen Johnston, Des Moines.

Silk Quilt ($3, $2, $1)—First, Helen Johnston, Des Moines; second, Mrs. A. J. Mathis, Des Moines; third, Mrs. Carl Hummell, Des Moines.

Outline Quilt ($3, $2, $1)—First, Mrs. Geo. Harnagel, Des Moines; second, Jennie Given, Des Moines; third, E. Heydon, Mitchellville.

Cradle Quilt ($2, $1, $1)—First, Mrs. H. F. Grass, Des Moines; second, Mrs. Reid Burks, Des Moines; third, Lucille Eichenlamb, Des Moines.

Cotton Patchwork Quilt ($2, $1, $1)—First, Katherine Hulse, Perry; second, Mrs. John E. Ash, Des Moines; third, Mrs. Ora Hick, Altoona.

Log Cabin Quilt ($2, $1, $1)—First, Miss Esther Seiberling, Mitchellville; second, Mrs. Wm. M. Bontilier, Forest City; third, Mrs. A. A. Johnson, Gladbrook.

Worsted Quilt ($2, $I)—First, E. Heydon, Mitchellville; second, Heler Johnston, Des Moines.

Specimen of Quilting Handmade, Not Less Than One Yard ($2, $1, $1)—First, Mary Jane Bennison, Des Moines; second, Helen Johnston, Des Moines; third, Mrs. W. C. Raney, Des Moines.

Silk Comfort ($3, $2)—First, Mrs. Will H. Zaiser, Jr., Des Moines; second, Bud Decker Smith, Des Moines.

Worsted Comfort ($2, $1, $1)—First, Bud Decker Smith, Des Moines; second, E. Heydon, Mitchellville; third, Mrs. G. W. Dietz, Des Moines.

Cotton Comfort ($1)—Third, Mrs. Will H. Zaiser, Jr., Des Moines.

Cotton Applique Quilt ($3, $2, $1)—First, Helen Johnston, Des Moines; second, Mrs. John E. Ash, Des Moines; third, Edna Crabtree, Polk City.

Cotton Braided Rug ($2, $1, $1)—First, Mrs. W. R. Alexander, Des Moines; second, J. M. Gustafson, Lake View; third, Mrs. Sadie M. Crane, Des Moines.

Cotton Pieced Quilt ($2, $1, $1)—First, Mrs. Clara Spitzer, Norwalk; second, Mrs. Wm. W. Bontilier, Forest City; third, Edna Crabtree, Polk City.

Woven Cotton Rug ($2)—First, E. Heydon, Mitchellville.

Work Other Than Named ($3, $2, $1)—First, Mrs. A. C. Olson, Des Moines; second, Hazel Poulos, Des Moines; third, Lillian Otte, Valley Junction.

ECONOMY CLASSIFICATION

SEWING

Work Dress ($2, $1, $1)—First, Mrs. Oliver Moe, Algona; second, Mrs. Emma R. Roberts, Des Moines; third, Mrs. A. J. Mathis, Des Moines.

Work Apron ($2, $1, $1)—First, Mrs. J. H. Boylan, Des Moines; second, Mrs. F. A. Mathis, Des Moines; third Mrs. Fred Mathis, Des Moines.

Made Over Dress ($2, $1, $1)—First, Mrs. Louise Smith, Des Moines; second, Mrs. Oliver Moe; third, Mrs. R. D. Kaufman, Des Moines.

Dress, Made From Cast-off Garments, for Child Under Eight Years ($2, $1, $1)—First, Mrs. Emma R. Roberts, Des Moines; second, Mable C. Luther, Des Moines; third, Miss Etta Keeling, Des Moines.

Best Dress, Made From Cast-Off Garments, for Child Between 8 and 16 Years ($2, $1, $1)—First, Mrs. R. J. Kaufmann; second, Mrs. G. W. Dietz; third, Mrs. Oliver Moe.

Child's Coat Made From Old Garment ($2, $1, $1)—First, Mrs. F. M. Jackson, Des Moines; second, M. D. Jump, Waukee; third, Mrs. Gale W. McMillan, Waukee.

Child's Underwear, Made From Cast-Off Knitted Underwear ($2, $1)—First, Mrs. Emma R. Roberts, Des Moines; second, Mable C. Luther.

Layette, Costing Less Than $5.00 ($2)—First, Mrs. J. W. Tyrrell, Des Moines.

Clothing Made From Flour or Sugar Sacks ($2, $1, $1)—First, Mrs. Oliver Moe; second, Mrs. Louise Smith; third, Mrs. W. C. Raney, Des Moines.

Boy's Suit, Made From Cast-Off Garments ($2, $1)—First, Mrs. Frank Scott, Bondurant; second, Mrs. R. J. Kaufmann.

Child's Clothing Made From Old Stockings ($2, $1, $1)—First, Mrs. Emma R. Roberts; second, Mrs. J. W. Tyrell; third, Mable C. Luther.

DARNING

Darning on Wool Garment ($2, $1)—First, Wm. J. Neimeyer, West Point; second, Jane Adamson, Ankeny.

Darning on Silk Garment ($2, $1)—First, Mrs. Oliver Moe; second, Jane Adamson.

Darning on Cotton Garment or Household Article ($2, $1)—First, Jane Adamson; second, Wm. J. Neimeyer.

Darning on Linen Garment or Household Article ($2, $1, $1)—First, Mrs. H. H. Johnston, Des Moines; second, Wm. J. Neimeyer, West Point; third, Mrs. Emma R. Roberts.

PATCHING

Patching on Silk Garment ($2, $1)—First, Mrs. Oliver Moe; second, Jane Adamson.

Patching on Wool Garment ($2, $1)—First, Jane Adamson; second, Mrs. Emma R. Roberts.

Patching on Cotton Garment or Household Article ($2, $1, $1)—First, Mrs. H. H. Johnston; second, Esther Brazelton, Ankeny; third, Mrs. Oliver Moe.

KNITTED WORK

Specimen Knit Lace Not Less Than Two Yards ($2, $1)—First, Mrs. Earl Duncan, Des Moines; second, Arminta B. Nere, Kamrar.

Pair Woolen Mittens ($1, 50 cents)—First, Mrs. Clara Spetzer, Norwalk; second, Arminta B. Nere.

Slumber Robe ($2)—First, Mrs. W. C. Raney, Des Moines.

Pair of Slippers, Hand Knit ($2, $1)—First, Mary L. Bevan, Des Moines; second, Leona B. Dietz, Des Moines.

Pair of Gloves, Hand Knit ($1, 50 cents)—First, Arminta B. Nere; second, Mrs. A. J. Nading, Dubuque.

Pair Woolen Stockings, Hand Knit ($1, 50 cents)—First, Andrea M. Smith, Des Moines; second, Mrs. Erick Anderson, Iowa Falls.

Pair Woolen Socks, Hand Knit ($1, 50 cents)—First, Andrea M. Smith; second, Mrs. M. Casidy, Des Moines.

Ladies' Sweater, Hand Knit ($3, $2)—First, Andrea M. Smith; second, Mrs. Carrie Geiger, South Amana.

Medallions (Six) ($2)—First, Mrs. Clara Spitzer.

Ladies' Knit Shawl ($2, $1)—First, Mary L. Bevan, Des Moines; second, Arminta B. Nere.

Knitted Work Other Than Named ($3, $2, $1)—First, Mrs. A. R. Mikkleson, Des Moines; second, Mrs. Earl Duncan; third, Mrs. W. F. Mitchell.

CROCHET

Medallions (Six) ($2, $1)—First, Mary L. Bevan; second, Mrs. Alice Gordon, Des Moines.

Sweater ($3, $2)—First, Mrs. H. F. Grass; second, Andrea H. Smith.

Filet Tidy ($2, $1)—First, M. S. Jones; second, Mrs. M. Casidy.

Tray, Mounted ($2, $1)—First, Mrs. W. F. Mitchell; second, Mrs. Wm. Hoefle, Des Moines.

Basket (50 cents)—Second, Mable E. Luther.

Luncheon Set ($5, $3, $2)—First, E. L. Thompson, Des Moines; second, Mrs. Frank Brehmer, Atlantic; third, Andrea M. Smith.

Pillow Cases, Trimmed With Crochet Edging or Insertion ($2, $1)—First, E. L. Thompson; second, Ethel A. Hayden, Des Moines.

Sheet, Crochet Trimming ($2, $1)—First, Almeda Dyer, Pleasantville; second, Ethel A. Hayden.

Towel, Crochet Trimming ($1, 50 cents)—First, Ina E. Metcalf, Des Moines; second, R. L. Thompson, Des Moines.

Turkish Towel, Crochet Trimming ($1, 50 cents)—First, Mrs. A. J. Mathis; second, Mrs. F. A. Mathis.

Collar ($2, $1)—First, Marion Brown, Des Moines; second, Emma Carruther, Des Moines.

Collar and Cuff Set ($1)—Second, Marion Brown, Des Moines.

Doily ($2, $1)—First, Mrs. A. J. Mathis; second, E. L. Thompson.

Centerpiece ($2, $1)—First, Mrs. Marion Cappock, Ankeny; second, Gretchen Nicholaas, Des Moines.

Bag ($1)—Second, Mrs. R. Rasmussen, Audubon.

Table Runner ($2, $1)—First, R. L. Thompson; second, J. M. Gustafson, Lake View.

Night Gown Yoke ($2, $1)—First, Almeda Dyer, Pleasantville; second, Ina E. Metcalf, Des Moines.

Corset Cover Yoke ($2, $1)—First, Mrs. R. L. Sterling, Des Moines; second, Mrs. B. O. Spahn, Slater.

Linen and Crochet Centerpiece ($2, $1)—First, Mrs. F. D. Bane, Pleasantville; second, Mrs. A. J. Mathis.

Linen and Crochet Doilies (Six) ($2, $1)—First, Mary L. Bevan, Des Moines; second, Mrs. J. B. De Frees, Des Moines.

Linen and Crochet Lunch Cloth ($3, $2, $2)—First, Ina E. Metcalf; second, Grace School, Runnells; third, Mrs. Rachel Hummell, Monroe.

Hugger ($2, $1)—First, E. L. Thompson; second, Elizabeth P. Brooks, Des Moines.

Cluny Scarf ($3, $2, $1)—First, Mrs. G. W. Dietz, Des Moines; second, Mrs. A. L. Van Trump, Des Moines; third, Mrs. A. J. Mathis.

Cluny Centerpiece ($1)—Third, Mary L. Bevan, Des Moines.

Cluny Yoke ($2)—Second, Mary L. Bevan.

Camisole ($2, $1)—First, Mrs. Fred Mathis; second, Mrs. A. J. Mathis.

Infant's Sacque ($1)—First, Mrs. Edward Van Zante, Pella.

Hood ($1, 50 cents)—First, Mrs. G. W. Diets; second, Mrs. A. R. Mikkleson.

Pair of Infant's Socks, Crochet ($1, 50 cents)—First, Mrs. Lee A. Perry, Indianola; second, M. S. Jones, Mitchellville.

Slumber Robe, Crochet ($1)—Third, Mrs. Edward Van Zante, Pella.

Pair of Slippers ($1, 50 cents)—First, E. Heydon, Mitchellville; second, Mrs. J. H. McBride, Polk City.

Cotton Lace, Not Less Than One Yard ($1, 50 cents)—First, Bud Decker Smith; second, Elizabeth Harbacheck, Moorland.

Crochet Lace on Curtain, One Pair ($2, $1)—First, Mrs. A. J. Mathis; second, Mrs. Earl Dunn, Des Moines.

Linen Lace, Not Less Than One Yard ($1, 50 cents)—First, Hazel Poulos, Des Moines; second, Mable C. Luther, Des Moines.

Scarf ($2)—First, Mrs. Maude Davidson, Des Moines.

Bedspread ($5, $3, $2)—First, Mrs. Celestine Brigione, Ft. Des Moines; second, Guavaleepe Rosa, Valley Junction; third, Mrs. E. R. Williams, Des Moines.

Candle Shades (50 cents)—Second, Mrs. W. J. Porter.

Specimen Crochet Work Other Than Named ($5, $3, $2)—First, Mrs. G. T. Smith, Reinbeck; second, Esther Brazelton; third, Mrs. Carrie Geiger, South Amana.

HAND NEEDLEWORK

Envelope Combination Suit ($2, $1)—First, Mrs. M. Casidy; second, Mrs. Oliver Moe.

Pillow Cases ($2, $1)—First, Mrs. Will H. Zaiser, Jr., Des Moines; second, Mrs. Geo. E. Meyer, Des Moines.

Sheets ($2, $1)—First, Mrs. Will H. Zaiser, Jr., Des Moines; second, Mrs. O. W. Burchird, Monroe.

Bedspread ($3, $2, $1)—First, Mrs. A. D. Reynolds, Des Moines; second, Ferne Botsford, Des Moines; third, Nelle Armstrong, Des Moines.

Ladies' Waist ($2, $1)—First, E. L. Thompson; second, Mrs. Oliver Moe.

Combination Suit ($2, $1)—First, Mrs. M. Casidy; second, Mrs. Will H. Zaiser, Jr.

Night Dress ($1)—First, Mrs. Will H. Zaiser, Jr.

Night Shirt ($1)—First, Mrs. Emma R. Roberts, Des Moines.

Child's Dress, Neatest Made ($2, $1)—First, Ina E. Metcalf; second, Mrs. H. F. Grass.

Undershirt ($1, 50 cents)—First, Mrs. Marion Cappock; second, Mrs. R. Rasmussen.

Corset Cover ($2, $1)—First, Flo Clark, Carlisle; second, Mable C. Luther.

Fancy Apron ($2, $1)—First, Mrs. C. S. Sulser, Ankeny; second, Mrs. M. Casidy.

Sofa Pillow ($3, $2)—First, Mrs. A. L. Van Trump; second, Mable C. Luther.

Neatest Mended Garment ($1)—First, Arminta R. Nere.

Neatest Darned Stocking ($1, 50 cents)—First, Jane Adamson; second, Mrs. Edward Van Zante.

Work Other Than Named ($3, $2, $1)—First, Mrs. O. S. Jamison, Oskaloosa; second, Mrs. H. B. Sixsmith, Des Moines; third, Mrs. H. D. Case, Des Moines.

WORK OF OLD LADIES

Pair of Knit Wool Socks ($1, 50 cents)—First, Mrs. H. Johnson, Gladbrook; second, E. Heydon, Mitchellville.

Pair of Knit Wool Mittens ($1)—First, Mrs. H. Johnson.

Pair of Knit Silk Mittens ($2, $1)—First, Mrs. W. C. Raney, Des Moines; second, Mrs. H. Johnson.

Bedspread ($5, $3, $2)—First, F. D. Brumm, Des Moines; second, Mrs. Amy A. Silcott, Valley Junction; third, Mrs. M. Casidy.

Neatest Darned Work, Any Article ($1)— Second, Jane Adamson.

Neatest Made Dress ($2, $1)—First, Mrs. Louise Smith; second, Mrs. John E. Ash.

Neatest Made Skirt ($2, $1)—First, Mrs. M. J. Hunter, Des Moines; second, Mrs. Louise Smith.

Specimen Drawn Work ($2, $1)—First, Mrs. H. Johnson; second, E. Heydon.

Specimen Outline Work ($2, $1)—First, E. Heydon; second, Mrs. M. A. Corrought, Bondurant.

Night Dress ($2, $1)—First, Mrs. Frank Scott, Bondurant; second, Mrs. M. A. Corrough.

Specimen Crochet Work ($2, $1)—First, Mrs. Amy A. Silcott; second, Mrs. Louise Smith.

Comfort ($2)—First, Mrs. M. Casidy.

Silk Quilt ($3, $2)—First, Mrs. C. A. Rounds, Des Moines; second, Helen Johnston.

Cotton Quilt ($2, $1)—First, Lavinia Kirby, Des Moines; second, Mary E. Munn, Des Moines.

Woolen Quilt ($2)—First, Mrs. Harriett Williams, Luther.

Specimen of Hemstitching ($2, $1)—First, E. Heydon; second, Lucile Eichenlamb, Des Moines.

Specimen of Embroidery Other Than Named ($3, $2, $1)—First, Elizabeth Blackman, Des Moines; second, Mrs. M. A. Corrough; third, Mrs. Frank Scott, Bondurant.

Apron, Neatest Made ($2, $1)—First, Mrs. M. Casidy; second, Mary E. Munn.

Specimen of Lace Work ($2, $1)—First, Lucile Eichenlamb; second, Mrs. Anna Moose, Des Moines.

Silk Embroidery Sofa Pillow ($2, $1)—First, Mrs. Louise Smith; second, Mrs. M. A. Corrough.

Silk Embroidery Lunch Cloth ($2, $1)—First, Mrs. Geo. Anderson, Bondurant; second, Lucile Eichenlamb.

Specimen Roman Embroidery ($1)—Second, Mrs. Louise Smith, Des Moines.

Stocking Bag ($1, 50 cents)—First, Lucile Eichenlamb; second, Mrs. Louise Smith.

Shopping Bag, Home-made ($2)—First, Mrs. M. Casidy.

Tatting Handkerchief ($2, $1)—First, M. S. Jones, Mitchellville; second, Mrs. W. C. Raney.

Work Other Than Named ($5, $3)—First, Mrs. A. Goinges, Des Moines; second, E. Heydon.

LINEN OR COTTON EMBROIDERY

Centerpiece, 22 Inches or Larger ($4, $3, $2)—First, Mrs. Will H. Zaiser, Jr., Des Moines; second, Mrs. Robert Dyer, Pleasantville; third, Mrs. R. Rasmussen, Audubon.

Handkerchief ($2, $1)—First, Mrs. H. F. Grass, Des Moines; second, Mrs. L. Jefferson, Des Moines.

Pair of Pillow Cases ($3, $2, $1)—First, Nelle Armstrong, Des Moines; second, Mrs. W. F. Mitchell, Des Moines; third, E. Heydon, Mitchellville.

Six Doilies ($2, $1)—First, Mrs. R. Rasmussen; second, Mrs. C. A. Rounds.

Six Napkins ($2, $1)—First, Ethyl A. Hayden, Des Moines; second, Nelle Armstrong.

Dresser Scarf ($2, $1)—First, R. L. Thompson, Des Moines; second, Mrs. Will H. Zaiser, Jr.

Table Cloth ($3, $1)—First, Andrea M. Smith; second, Mrs. M. A. Corrough.

Sofa Pillow ($2, $1)—First, Rose Seffert, Gladbrook; second, Selma Ehrman, Des Moines.

Buffet Set ($2, $1)—First, Bertha A. Sropp, Rockwell City; second, Mrs. J. L. Smith, Des Moines.

Night Gown Yoke and Cuffs ($2, $1, $1)—First, Mrs. Will H. Zaiser, Jr., second, Mrs. H. F. Grass; third, Mary Jane Bennison.

Baby Dress ($2, $1)—First, Hannah Portel, Des Moines; second, Mrs. Edward Van Zante.

Baby Cap ($2, $1)—First, Mable C. Luther; second, Ina E. Metcalf.

Lunch Cloth and Napkins ($5, $3, $2)—First, Nelle Armstrong; second, Mrs. John E. Ash; third, Mrs. W. F. Mitchell.

Camisole ($1)—Second, Bud Decker Smith.

Pair of Towels ($1, 50 cents)—First, Mrs. Will H. Zaiser, Jr.; second, Margaret Hickelooper, Des Moines.

Shirt Waist ($2, $1)—First, Mrs. R. Rasmussen; second, Mrs. M. A. Corrough.

Pair Rompers ($2, $1)—First, Mrs. R. Rasmussen; second, Mrs. G. W. Dietz.

Specimen Norwegian Embroidery ($3, $1)—First, Mary Jane Bennison; second, Mrs. R. Rasmussen.

Dressing Jacket and Cap ($2, $1)—Second, Ethyl A. Hayden; third, Mable E. Luther.

Specimen Eyelet Embroidery ($2, $1)—First, Andrea M. Smith, Des Moines; second, Mrs. H. F. Grass, Des Moines.

Specimen Coronation Cord Embroidery ($2, $1)—First, Elizabeth P. Brooks, Des Moines; second, Mrs. M. Casidy.

Bed Set ($5, $3, $2)—First, Mrs. J. A. Campbell, Des Moines; second, Mrs. J. L. Smith; third, Mrs. Will H. Zaiser, Jr.

Work Other Than Named ($3, $2, $1)—First, Bertha A. Sropp, Rockwell City; second, Blanch Van Gorpe, Mitchellville; third, Mrs. H. H. Johnson, Des Moines.

SILK EMBROIDERY IN COLORS

Lunch Cloth, Conventional ($3, $2)—First, Hannah Portel, Des Moines; second, Mrs. Frank Scott, Bondurant.

Piano Scarf ($3)—First, Mrs. R. Rasmussen, Audubon.

Centerpiece, Any Design ($3, $2, $1)—First Mrs. H. B. Sixsmith, Des Moines; second, Mrs. Chas. M. Craig, Mitchellville; third, Mrs. Louise Smith, Des Moines.

Tray Cloth ($2, $1)—First, Mrs. R. Rassmussen, Audubon; second, Mrs. W. J. Porter, Ankeny.

Bag, Any Kind ($1, 50 cents)—First, Mrs. Reid Burks, Des Moines; second, Mrs. W. J. Porter, Ankeny.

Sofa Pillow ($2, $1)—First, Hannah Portel; second, Ferne Botsford, Des Moines.

Six Doilies ($1)—Third, Lucille Eichenlamb, Des Moines.

Envelope Combination Suit ($2, $1)—First, Evelyn Grand Pre, Des Moines; second, Bud Decker Smith, Des Moines.

Camisole ($1)—Second, Bud Decker Smith, Des Moines.

Work Other Than Named ($3, $2, $1)—First, G. F. Smith, Reinbeck; second, Mrs. H. F. Ibsen, Des Moines; third, Mrs. Earl Nickerson, Des Moines.

WHITE SILK EMBROIDERY

Centerpiece, Any Design ($3, $2)—First, Mrs. E. W. Freel, Pleasantville; second, Mrs. Louise Smith, Des Moines.

Tray Cloth ($2, $1)—First Evelyn Grand Pre, Des Moines; second, Bud Decker Smith, Des Moines.

Child's Flannel Skirt ($2, $1)—First, Evelyn Grand Pre, Des Moines; second, Bud Decker Smith, Des Moines.

Infant's Shawl ($2, $1)—First, Mrs. F. Happe, Danbury; second, Hannah Portel.

Infant's Cap ($1, 50 cents)—First, Mrs. R. Rasmussen, Audubon; second, Bud Decker Smith, Des Moines.

Work Other Than Named ($3, $2, $1)—First, Lucille Eichenlamb, Des Moines; second, Mrs. Geo. Anderson, Bondurant; third, Helen Johnston, Des Moines.

ROMAN EMBROIDERY

Lunch Cloth ($3, $1)—First, Ina E. Metcalf, Des Moines; third, Mrs. Louise Smith, Des Moines.

Work Other Than Named ($3, $2, $1)—First, Ina E. Metcalf; second, Hannah Portel, Des Moines; third, Mrs. R. Rasmussen, Audubon.

CROSS STITCH EMBROIDERY

Sofa Pillow ($3, $2, $1)—First, Mrs. L. Jefferson, Des Moines; second, Mrs. H. T. Ibsen, Des Moines; third, Mrs. R. Rasmussen.

Centerpiece ($3, $2)—First, Mrs. R. Rasmussen; second, E. Heydon, Mitchellville.

Scarf ($2, $1)—First, Mrs. L. Jefferson; second, Mrs. W. F. Mitchell, Des Moines.

Table Cover ($5, $3, $2)—First, Mrs. L. Jefferson; second, Mary Jane Bennison, Des Moines; third, Mrs. W. F. Mitchell, Des Moines.

Bag ($2)—First, Mrs. H. D. Case, Des Moines.

Pair of Towels ($2, $1)—First, E. L. Thompson; second, R. L. Thompson.

Luncheon Set ($2)—Third, Andrea M. Smith, Des Moines.

Pair Pillow Slips ($2)—First, Mrs. R. Rasmussen.

Bed Spread ($5, $3, $2)—First, Mrs. M. J. Hunter, Des Moines; second, Mrs. C. C. Vail, Des Moines; third, Hannah Portel, Des Moines.

Doily Roll ($2, $1)—First, Hannah Portel; second, Mrs. W. J. Porter, Ankeny.

Card Table Cover ($2, $1)—First, Andrea M. Smith; second, Bud Decker Smith.

Hot Roll Case ($1)—Second, Mrs. W. J. Porter.

Work Other Than Named ($3, $2, $1)—First, Mrs. H. D. Case; second, Mrs. R. Rasmussen; third, Mrs. L. Jefferson.

HARDANGER EMBROIDERY

Lunch Cloth ($3, $2)—First, Mrs. E. M. Meyer, Des Moines; second, Mrs. O. C. Olson, Des Moines.

Dresser Scarf ($2, $1)—First, Bud Decker Smith; second, Mrs. E. N. Meyer.

Centerpiece ($2, $1)—Second, Bud Decker Smith; third, Mrs. C. A. Rounds, Des Moines.

Sofa Pillow ($2, $1)—First, Helen Johnston, Des Moines; second, Mrs. E. N. Meyer.

Bag ($1)—Second, Bud Decker Smith.

Sideboard Cover ($2, $1)—First, Bud Decker Smith; second, Mrs. E. N. Meyer.

MLLE FLEUR

Scarf ($2, $1)—First, Bud Decker Smith; second, Mrs. W. F. Mitchell.

Centerpiece ($2, $1)—First, Bud Decker Smith; second, Mrs. W. F Mitchell.

MEXICAN EMBROIDERY AND DRAWNWORK, HANDMADE

Carver's Cloth ($2, $1)—First, M. S. Jones; second, Mrs. W. F. Mitchell.

Six Napkins ($2, $1)—First, Mrs. W. F. Mitchell; second, E. Heydon.

Table Cloth ($3, $2, $1)—First, E. Heydon; second, Mrs. W. F. Mitchell; third, Nelle Armstrong.

Dresser Cover ($2, $1)—First, Mrs. W. F. Mitchell; second, M. S. Jones.

Handkerchief ($2, $1, 50 cents)—First, M. S. Jones; second, E. Heydon; third, Lucille Eichenlamb.

Six Doilies ($1, 50 cents)—First, Mrs. W. F. Mitchell; second, Mrs. Louise Smith.

Apron ($2, $1)—First, Mrs. W. F. Mitchell; second, Mrs. Louise Smith.

Tray Cloth ($2, $1)—First, M. S. Jones; second, Mrs. W. F. Mitchell.

Pillow Cases ($2, $1)—First, Bud Decker Smith; second, Mrs. R. Rasmussen.

Work Other Than Named ($3, $2, $1)—First, Lucille Eichenlamb; second, Mrs. W. F. Mitchell; third, M. S. Jones.

IRISH CROCHET

Best Trimmed Shirt Waist ($3, $2, $1)—First, Mary L. Bevan, Des Moines; second, E. L. Thompson; third, R. L. Thompson.

Dresser Scarf Trimmed ($2, $1)—First, E. L. Thompson; second, Mrs. F. A. Mathis.

Bag ($1)—First, Mable C. Luther.

Collar ($2, $1)—First, Mrs. M. Cassidy; second, E. L. Thompson.

Collar and Cuffs ($1)—Third, E. L. Thompson.

Yoke ($2, $1)—First, M. S. Jones; second, Bud Decker Smith.

Infant's Cap ($2, $1)—First, Ina E. Metcalf; second, Emma Carruther, Des Moines.

Jabot ($2, $1)—First, Mary L. Bevan; second, E. L. Thompson.

Work Other Than Named ($3, $2, $1)—First, E. L. Thompson; second, Mrs. M. Cassidy; third, Mable C. Luther.

POINT LACE

Handkerchief ($2, $1)—First, Dr. C. F. Spring, Des Moines; second, M. S. Jones, Mitchellville.

Infant's Cap ($2)—First, Dr. C. F. Spring.

Tie Ends ($2)—First, M. S. Jones.

TATTING

Table Cloth Trimmed With Tatting ($5, $3, $2)—First, Mrs. J. G. Cook, Des Moines; second, Mrs. B. W. Phillips, De Soto; third, Edna Crabtree, Polk City.

Edging and Insertion, One Yard ($2, $1)—First, Nora Burgess, Elkhart; second, Mrs. W. F. Mitchell, Des Moines.

Handkerchief ($1, 50 cents)—First, Loretta E. M. McKuskee, Altoona; second, Mrs. E. N. Meyer, Des Moines.

Tie Ends or Jabot ($1)—First, M. S. Jones, Mitchellville.

Infant's Cap ($2, $1)—First, Nora Burgess; second, Loretta E. McKuskee.

Towel, Trimmed With Tatting ($2, $1)—First, Mrs. E. N. Meyer; second, Almeda Dyer, Pleasantville.

Apron Trimmed With Tatting ($2, $1)—First, Maude Shook, Des Moines; second, Almeda Dyer, Pleasantville.

Centerpiece ($3, $2, $1)—First, Mrs. B. M. Reynolds, Mitchellville; second, Mrs. B. W. Phillips, Des Moines; third, Loretta E. McKuskee, Altoona.

Pillow Cases Trimmed With Tatting ($3, $2, $1)—First, Loretta E. McKuskee, Altoona; second, Grace Schrool, Runnells; third, Mrs. B. W. Philipps, De Soto.

Tatting Yoke ($2, $1)—First, Mrs. Louise Smith, Des Moines; second, Nora Burgess, Elkhart.

Corset Cover Trimmed With Tatting ($2, $1)—First, Ferne Botsford, Des Moines; second, R. L. Thompson, Des Moines.

Table Runner ($2, $1)—First, Mrs. E. N. Meyer; second, Edna Crabtree.

Piano Scarf ($3, $2, $1)—First, Mrs. E. N. Meyer; second, Mrs. B. W. Philipps; third, Maude Shook.

Sofa Pillow ($1)—Second, Jennie Given, Des Moines.

Collar ($2, $1)—First, Lorretta E. McKuskee; second, Nora Burgess.

Tatted Lace on Curtain, One Pair ($3, $2)—First, Edna Crabtree; second, Mrs. Chas. Arnold, Des Moines.

Work Other Than Named ($3, $2, $1)—First, Arminta B. Nere, Kamrar; second, Mrs. J. B. DeFrees, Des Moines; third, Gretchen Nicholas, Des Moines.

FRENCH KNOT EMBROIDERY.

Pair Pillow Slips ($3, $2, $1)—First, Evelyn Grand Pre, Des Moines; second, Mrs. R. Rasmussen, Audubon; third, Bud Decker Smith, Des Moines.

Centerpiece ($2, $1)—Second, Lucile Eichenlaub, Des Moines; third, Mrs. Louise Smith, Des Moines.

Pair Towels ($2, $1)—First, Bud Decker Smith, Des Moines; second, Mrs. M. Casidy, Des Moines.

Hot Roll Case ($1)—Second, Evelyn Grand Pre, Des Moines.

Baby Dress ($3, $2)—First, Evelyn Grand Pre, Des Moines; second, Minnetta Blue, Des Moines.

Bed Spread ($5, $3, $2)—First, Margaret Hickenlooper, Des Moines; second, Ferne Botsford, Des Moines; third, Miss Edna Ham, Waukee.

Library Table Runner ($3, $2, $1)—First, Evelyn Grand Pre, Des Moines; second, Ethyl A. Hayden, Des Moines; third, Ferne Botsford, Des Moines.

Dresser Scarf ($2, $1)—First, Evelyn Grand Pre, Des Moines; second, Ethyl A. Hayden, Des Moines.

Buffet Set ($3, $2, $1)—First, Evelyn Grand Pre, Des Moines; second, Bud Decker Smith, Des Moines; third, Mrs. J. B. DeFrees, Des Moines.

Card Table Cover ($2, $1)—First, Ethyl A. Hayden; second, Nelle Armstrong, Des Moines.

Pair Curtains ($5, $3, $2)—First, Minnetta Blue, Des Moines; second. Evelyn Grand Pre, Des Moines; third, Bud Decker Smith, Des Moines.

Night Gown ($2, $1)—First, Minnetta Blue, Des Moines; second, Evelyn Grand Pre, Des Moines.

Camisole ($2, $1)—First, Evelyn Grand Pre, Des Moines; second, Bud Decker Smith, Des Moines.

Combination Suit ($2)—First, Minnetta Blue, Des Moines.

BEAD WORK, STENCIL WORK

Bead Chain ($3, $2)—First, Mrs. M. Casidy, Des Moines; second, M. S. Jones, Mitchellville.

Bead Purse ($3, $2)—First, Mrs. H. F. Grass, Des Moines; second, Mrs. F. M. Jackson, Des Moines.

Bead Belt ($3, $2)—First, Mrs. M. Casidy, Des Moines; second, M. S. Jones, Mitchellville.

Raffia Basket ($2, $1)—First, Mrs. Emma R. Roberts, Des Moines; second, Mrs. W. C. Raney, Des Moines.

Pair Stenciled Portieres ($1)—Second, Mrs. W. J. Porter, Ankeny.

Stenciled Piano Scarf ($1)—Second, Mrs. W. J. Porter, Ankeny.

Stenciled Table Cover ($2)—First, Mrs. W. J. Porter, Ankeny.

Stenciled Cushion ($2, $1)—First, Mrs. W. J. Porter, Ankeny; second, Claude A. Patterson, Des Moines.

Stenciled Bag ($2)—First, Mrs. W. J. Porter, Ankeny.

Stenciled Scarf ($2)—First, Mrs. W. J. Porter, Ankeny.

Other Than Named ($3, $2)—First, Emma R. Roberts, Des Moines; second, Mary Jane Bennison, Des Moines.

PROFESSIONAL LIST HAND PAINTED CHINA

JUDGE...A. J. HESS.

Best Collection ($10, $6, $4)—First, Mrs. Lake Bower, Des Moines; second, Francis B. Stevenson, Des Moines; third, Ada Borre, Des Moines.

Vase Over Twelve Inches ($4, $3, $2)—First, Mrs. E. L. Chew, Des Moines; second, Ada Borre; third, Mrs. Lake Bower.

Water Pitcher ($3, $2, $1)—First, Mrs. Lake Bower; second, Mrs. E. L. Chew; third, Ada Borre.

Smoker's Set ($3, $2)—First, Francis B. Stevenson; second, Ada Borre.

Dresser Set, Three Pieces or More ($4, $3, $2)—First, Francis B. Stevenson; second, Ada Borre; third, Mrs. Lake Bower.

Bon-Bon Box, Covered ($3, $2, $1)—First, Francis B. Stevenson; second, Mrs. Lake Bower; third, Mrs. E. L. Chew.

Sugar and Creamer ($3, $2, $1)—First, Mrs. Lake Bower; second, Mrs. E. L. Chew; third, Francis B. Stevenson.

Serving Tray ($3, $2, $1)—First, Francis B. Stevenson; second, Mrs. Lake Bower; third, Ada Borre.

Set of Plates (Eight Inches or More) ($3, $2, $1)—First, Mrs. Lake Bower; second, Francis B. Stevenson; third, Mrs. E. L. Chew.

Candlestick ($2, $1, $1)—First, Francis B. Stevenson; second, Mrs. E. L. Chew; third, Mrs. Lake Bower.

Tea Pot ($3, $2, $1)—First, Mrs. Lake Bower; second, Francis B. Stevenson; third, Ada Borre.

Open Bon-Bon ($2, $1, $1)—First, Francis Stevenson; second, Ada Borre; third, Mrs. Lake Bower.

Bread or Cake Plate ($2, $1, $1)—First, Mrs. Lake Bower; second, Mrs. E. L. Chew; third, Ada Borre.

Whipped Cream Bowl ($2, $1, $1)—First, Mrs. R. L. Sterling, Des Moines; second, Ada Borre; third, Mrs. Lake Bower.

Coffee or Chocolate Pot ($3, $2, $1)—First, Mrs. Lake Bower; second, Ada Borre; third, Francis B. Stevenson.

Fancy Cup and Saucer ($2, $1, $1)—First, Mrs. Lake Bower; second, Francis B. Stevenson; third, Ada Borre.

Decorated Tile ($2, $1, $1)—First, Ada Borre; second, Mrs. R. L. Sterling; third, Mrs. Lake Bower.

Chop Plate ($3, $2, $1)—First, Mrs. Lake Bower; second, Mrs. E. L. Chew; third, Mrs. R. L. Sterling.

Bread and Butter Plates (Six Inches) ($3, $2, $1)—First, Francis B. Stevenson; second, Mrs. E. L. Chew; third, Mrs. R. L. Sterling.

Olive or Pickle Dish ($2, $1, $1)—First, Mrs. Lake Bower; second, Mrs. R. L. Sterling; third, Francis B. Stevenson.

Marmalade Jar and Plate ($2, $1, $1)—First, Mrs. Lake Bower; second, Mrs. R. L. Sterling; third, Ada Borre.

Nut Bowl (Six Individual Bowls) ($3, $1.50, $1)—First, Mrs. Lake Bower; second, Ada Borre; third, Francis B. Stevenson.

Radish Tray ($2, $1, $1)—First, Mrs. Lake Bower; second, Ada Borre; third, Francis B. Stevenson.

Syrup Pitcher ($2, $1, $1)—First, Francis B. Stevenson; second, Mrs. Lake Bower; third, Ada Borre.

Bread and Milk Set ($2, $1)—Second, Mrs. Lake Bower; third, Francis B. Stevenson.

Cheese Plate ($2, $1, $1)—First, Mrs. Lake Bower; second, Mrs. E. L. Chew; third, Francis B. Stevenson.

Salad Bowl ($3, $2, $1)—First, Francis B. Stevenson; second, Mrs. Lake Bower; third, Ada Borre.

Fruit Bowl ($3, $2, $1)—First, Mrs. Lake Bower; second, Mrs. R. L. Sterling; third, Francis B. Stevenson.

Standard or Footed Compote ($3, $1.50, $1)—First, Francis B. Stevenson; second, Ada Borre; third, Mrs. Lake Bower.

Relish Set ($2, $1, $1)—First, Mrs. Lake Bower; second, Francis B. Stevenson; third, Ada Borre.

Set Fruit Plates ($4, $2, $1)—First, Francis B. Stevenson; second, Mrs. R. L. Sterling; third, Mrs. Lake Bower.

Card Receiver ($2, $1, $1)—First, Francis B. Stevenson; second, Ada Borre; third, Mrs. E. L. Chew.

Vase, Under Twelve Inches ($3, $2, $1)—First, Mrs. Lake Bower; second, Francis B. Stevenson; third, Mrs. E. L. Chew.

Meat Set (Platter and Six Plates) ($4, $3)—Second, Francis B. Stevenson; third, Mrs. Lake Bower.

Tumbler Coasters ($3, $1.50, $1)—First, Mrs. Lake Bower; second, Ada Borre; third, Francis B. Stevenson.

Milk Pitcher ($2, $1)—First, Ada Borre; second, Mrs. Lake Bower.

Guest Room Set ($2, $1)—First, Francis B. Stevenson; second, Ada Borre.

Talcum Shaker ($2, $1, $1)—First, Ada Borre; second, Francis B. Stevenson; third, Helen Johnston, Des Moines.

Tea Pot Stand ($2, $1, $1)—First, Francis B. Stevenson; second, Ada Borre; third, Mrs. Lake Bower.

Tea Caddy ($2, $1)—First, Francis B. Stevenson; second, Ada Borre.

Ice or Butter Tub ($2, $1.50)—First, Mrs. Lake Bower; second, Ada Borre.

Fernery ($3, $2)—First, Ada Borre; second, Francis B. Stevenson.

Original Conventional Design for Plate, Ten Inches ($3, $1.50)—First, Francis B. Stevenson; second, Ada Borre.

Other Than Named ($3, $2, $1)—First, Mrs. Lake Bower; second, Mrs. E. L. Chew; third, Francis B. Stevenson.

AMATEUR LIST HAND-PAINTED CHINA

Best Collection ($6, $4, $2)—First, R. L. Thompson, Des Moines; second, Mrs. E. H. Dukehart, Des Moines; third, Mrs. H. F. Ibsen, Des Moines.

Chocolate Pot ($4, $3, $2)—First, Mrs. H. F. Ibsen; second, Mrs. Harry Hartzler, Indianola; third, R. L. Thompson.

Comb and Brush Tray ($3, $2, $1)—First, Mrs. J. C. Miller, Des Moines; second, Edna Wheeler, Des Moines; third, Mrs. S. P. Roscoe, Des Moines.

Perfume Bottle ($2, $1, $1)—First, Mrs. E. H. Dukehart, Des Moines; second, R. L. Thompson; third, Edna Wheeler.

Spoon Tray ($2, $1, $1)—First, R. L. Thompson; second, Mrs. E. H. Dukehart; third, Mrs. Harry Hartzler.

Tea Pot ($3, $2, $1)—First, R. L. Thompson; second, Mrs. S. P. Roscoe; third, Mrs. E. H. Dukehart.

Plates (8 Inches or More) Six ($3, $2, $1)—First, Mae Goodbarn, Des Moines; second, Mrs. Harry Hartzler; third, Edith Vinsee Brownlie, Des Moines.

Tete-a-Tete Set (3 Pieces) ($3, $2)—First, R. L. Thompson; second, Mrs. E. H. Dukehart.

Bread and Milk Set ($2, $1, $1)—First, Mrs. E. H. Dukehart; second, Mrs. Anna E. Shettle, Des Moines; third, Edna Wheeler.

Relish Set ($1.50, $1, $1)—First, R. L. Thompson; second, Mrs. Harry Hartzler; third, Mrs. H. F. Ibsen.

Sugar and Creamer ($3, $2, $1)—First, Mrs. H. F. Ibsen; second, Mae Goodbarn; third, Mrs. Harry Hartzler.

Loaf Sugar Holder ($1.50, $1, $1)—First, Mrs. E. H. Dukehart; second, Mrs. J. C. Miller; third, Edna Wheeler.

Vase, Over Ten Inches ($4, $3, $2)—First, Edna Wheeler; second, R. L. Thompson; third, Mrs. H. F. Ibsen.

Vase, Under Ten Inches ($3, $1.50, $1)—First, Mrs. E. H. Dukehart; second, Mrs. H. F. Ibsen; third, Mrs. Harry Hartzler.

Decorated Tile ($2, $1, $1)—First, Mrs. H. F. Ibsen; second, Edna Wheeler; third, Mrs. J. C. Miller.

Set Cups and Saucers ($3, $2, $1)—First, Mrs. H. F. Ibsen; second, Ivenetta Stearns, Des Moines; third, Mrs. J. C. Miller.

Rose Bowl or Flower Holder ($3, $2, $1)—First, Mae Goodbarn; second, R. L. Thompson; third, Mrs. E. H. Dukehart.

Covered Bon-Bon ($4, $3, $1.50)—First, Mrs. E. H. Dukehart; second, R. L. Thompson; third, Edna Wheeler.

Olive Dish ($2, $1, $1)—First, Ferne Botsford; second, Mae Goodbarn; third, R. L. Thompson.

Desk Set ($1)—Third, Mrs. Anna E. Shettle.

Marmalade Jar and Plate ($3, $1.50, $1)—First, Mrs. E. H. Dukehart; second, Mrs. Anna E. Shettle; third, Mrs. H. F. Ibsen.

Candlestick ($2, $1, $1)—First, Edith Vinsee Brownlie; second, Mrs. Harry Hartzler; third, Edna Wheeler.

Nut Bowl ($3, $1.50, $1)—First, R. L. Thompson; second, Mae Goodbarn; third, Mrs. Harry Hartzler.

Mayonnaise Bowl ($3, $1.50, $1)—First, R. L. Thompson; second, Mrs. Harry Hartzler; third, Mrs. E. H. Dukehart.

Toast or Tea Set ($2, $1)—First, Mrs. F. M. Jackson, Des Moines; second, Mrs. Anna E. Shettle.

Pitcher (Water or Lemonade) ($3, $2, $1)—First, Mrs. S. P. Roscoe; second, Mrs. Harry Hartzler; third, Mrs. E. H. Dukehart.

Tobacco Jar ($3, $2, $1)—First, Edna Wheeler; second, Mrs. Harry Hartzler; third, Mrs. J. C. Miller.

Syrup Pitcher ($2, $1, $1)—First, Mrs. J. C. Miller; second, H. F. Ibsen; third, Mrs. E. H. Dukehart.

Milk Pitcher ($3, $1.50, $1)—First, Mae Goodbarn; second, Edith Vinsee Brownlie; third, Mrs. H. F. Ibsen.

Tumbler Coasters ($3, $1.50, $1)—First, Mrs. H. F. Ibsen; second, Mrs. J. C. Miller; third, Mrs. Anna E. Shettle.

Guest Room Set ($3, $1.50, $1)—First, Mrs. Harry Hartzler; second, Mrs. H. F. Ibsen; third, Mrs. F. M. Jackson.

Open Bon-Bon ($2, $1, $1)—First, R. L. Thompson; second, Mae Goodbarn; third, Mrs. S. P. Roscoe.

Chop Plate ($3, $1.50, $1)—First, Mrs. H. F. Ibsen; second, Mae Goodbarn; third, Mrs. S. P. Roscoe.

Cake Plate ($3, $1, $1)—First, Edith Vinsee Brownlie; second, Mrs. Harry Hartzler; third, R. L. Thompson.

Fernery ($3, $2, $1)—First, Mrs. F. M. Jackson; second, Mae Goodbarn; third, Mrs. Anna E. Shettle.

Bread and Butter Plates (Six Inch) ($3, $2, $1)—First, Mae Goodbarn; second, Mrs. S. P. Roscoe; third, Mrs. E. H. Dukehart.

Fruit Set (Bowl and Six Plates) ($3, $2, $1)—First, Edith Vinsee Brownlie; second, Mrs. Anna E. Shettle; third, Edna Wheeler.

Other Than Named ($3, $1.50, $1, $1)—First, R. L. Thompson; second, Edith Vinsee Brownlie; third, Mrs. H. F. Ibsen; fourth, Ferne Botsford.

GRAPHIC AND PLASTIC ART

SUPERINTENDENT..............PROF. C. A. CUMMING, Des Moines, Iowa.
JUDGE..DAWSON WATSON.

Oil Painting ($80, $50, $40, $30)—First, Linn Culbertson, Des Moines; second, Catherine McCartney, Iowa City; third, Alice McKee, Des Moines; fourth, Velma Wallace, Des Moines.

Water Color Painting ($40, $25, $20)—First, Kate Keith Van Duzee, Dubuque; second, Geo. F. White, Des Moines; third, Claude A. Patterson, Des Moines.

Black and White or Monochrome Drawing ($30, $20, $15, $10)—First, Margaret Hayes, Iowa City; second, Geo. S. S. Stout, Iowa City; third, Alice McKee, Des Moines; fourth, Kate Keith Van Duzee, Dubuque.

Posters of a Pictorial or Decorative Design ($30, $20, $15, $10)—First, Geo. F. White, Des Moines; second, Louise Orwig, Des Moines; third, Mildred Cotnam, Des Moines; fourth, Claude A. Patterson, Des Moines.

Collection of Not Less Than Six or More Decorative Designs Other Than Pictorial ($40, $25, $20, $15)—First, Bertha Shore, Des Moines; second, Claude A. Patterson, Des Moines; third, Marie V. Wiley, Des Moines; fourth, Mrs. J. P. Lorentzen, Des Moines.

JUNIOR DIVISION

Oil Painting ($10, $8)—First, M. Holmes, Des Moines; second, Lela Nelson, Des Moines.

Water Color Painting ($10, $8)—First, Millicent Volz, Elkhart; second, M. Holmes, Des Moines.

Black and White or Monochrome Drawing ($10, $8)—First, Katherine Fulton, Des Moines; second, M. Holmes, Des Moines.

JUNIOR DEPARTMENT

JUDGE.................................B. E. HEITZMANN, Ames, Iowa.

CORN

Ten Ears White Corn (1921 Crop) ($5)—First, Fred Overly, Indianola.

Ten Ears Yellow Corn (1921 Crop) ($5, $3, $2, $1)—First, Willard Steenwyk, Mitchellville; second, Leland Taylor, Mitchellville; third, Keith Taylor, Mitchellville; fourth, Wayne Taylor, Mitchellville.

APPLES

JUDGE............................C. W. WOODSTOCK, Mondamin, Iowa.

Exhibit Must Consist of a Plate Collection of Five Apples to the Plate, at Least Six Varieties. Duplicate plates count one-half ($10, $6, $4)—First, Fred Overly; second, McCallsburg Spraying Club, McCallsburg; third, Roland Spraying Club, Roland.

Yellow Transparent ($1, 75 cents)—First, Fred Overly; second, Glen Lehman, Hubbard.

Duchess (of Oldenburg) ($1, 75 cents)—First, Fred Overly; second, Clair Shupe, Lacona.

Wealthy ($1, 75 cents)—First, Fred Overly; second, Glen Lehman.

Grimes Golden ($1, 75 cents, 50 cents)—First, Fred Overly; second, Dale Lester, Milo; third, Everl Briggs, Liberty Center.

Jonathan ($1, 75 cents, 50 cents)—First, Fred Overly; second, Everl Briggs; third, Guy Landy, Lacona.

Northwestern Greening ($1, 75 cents, 50 cents)—First, Everl Briggs; second, Glen Lehman; third, Fred Overly.

Salome ($1)—First, Glen Lehman.

Winesap ($1)—First, Glen Lehman.

Ben Davis ($1, 75 cents, 50 cents)—First, Clair Shupe; second, Fred Overly; third, Glen Lehman.

Any Variety Not Listed, Price's Sweet ($1, 75 cents)—First, Fred Overly; second, Glen Lehman.

Any Other Variety ($1, 75 cents)—First, Fred Overly; second, Glen Lehman.

Tolman's Sweet ($1, 75 cents, 50 cents)—First, Dale Lester, Milo; second, Guy Landy; third, Glen Lehman.

Lowell ($1, 75 cents)—First, Fred Overly; second, Glen Lehman.

Harry Komph ($1)—First, Glen Lehman.

Dora ($1)—First, Glen Lehman.

Minkler ($1)—First, Glen Lehman.

Flora Bell ($1)—First, Glen Lehman.

Wolf River ($1)—First, Glen Lehman.

GARDEN EXHIBIT

JUDGE..............................C. V. HOLSINGER, Ames, Iowa.

Water Color Posters Club Display of Six Posters Entered in the Name of the Club by the Club Leader ($5, $3, $2, $1, $1, $1)—First, Garfield Garden Club, Ottumwa; second, Norma Heald, Sioux City; third, Hedrick Garden Club, Ottumwa; fourth, Lincoln Garden Club, Ottumwa; fifth, Stewart School Garden Club, Ottumwa; sixth, Adams School Garden Club, Ottumwa.

Pictures Cut Out and Pasted for Poster. Club Display of Six Posters Entered in the Name of the Club by the Club Leader ($5)—First, Hedrick Garden Club, Ottumwa.

Water Color Poster by Individual Club Member ($2, $1.50, $1, $1, $1, $1, $1, $1)—First, Ethel Galey, Ottumwa; second, Freda Leving, Ottumwa; third, Veronica Flactiff, Ottumwa; fourth, Joseph Means, Keokuk; fifth, Vivian Salpin, Ottumwa; sixth, Helen Hildebrand, Ottumwa; seventh, Gerald Roby, Ottumwa; eighth, Louise Snechting, Ottumwa.

Pictures Cut Out and Pasted by Club Member ($2, $1.50, $1, $1, $1, $1, $1, $1)—First, Vivian Salpin; second, Emma Sloan, Ottumwa; third, Leota Clements, Keokuk; fourth, Allen Bert Burk, Keokuk; fifth, Len Moffit, Ottumwa; sixth, Grace Can, Keokuk; seventh, Florence Hunter, Ottumwa; eighth, Warren Mow, Keokuk.

Club Display of Vegetables Entered in the Name of the Club Leader ($12, $10, $5, $3, $2, $2, $2)—First, Ottumwa Garden Club, Ottumwa; second, Mable Searl, Clarinda; third, M. H. White, Sioux City; fourth, Lincoln Garden Club, Ottumwa; fifth, Jefferson Garden Club, Ottumwa; sixth, Adams School Garden Club, Ottumwa; seventh, Agassy Garden Club, Ottumwa.

Display of Vegetables by Individual. Award Based Upon Winnings in Posters and Vegetable Display ($7, $5, $3, $2, $1, $1, $1, $1)—First, Len Moffit, Ottumwa; second, Alice Beck, Ottumwa; third, Maurice McDavitt, Ottumwa; fourth, Fulton Neurock, Ottumwa; fifth, Myron La Pointe, Ottumwa; sixth, Max Masmar, Clarinda; seventh, Lester Moffit, Ottumwa; eighth, Howard Jones, Ottumwa.

SPECIAL PREMIUM

Winner of first place will be awarded a garden plow complete with attachments by the Alexander Manufacturing Co., Ames. Paul Menefee, Ottumwa.

SINGLE VARIETIES

Plate of Six Beets ($1, 75 cents, 50 cents)—First, Paul Menefee; second, Evelyn Edmund, Ottumwa; third, Maurice McDavitt.

Plate of Dry White Beans ($1, 75 cents, 50 cents)—First, Alice Beck, Ottumwa; second, Neal Rastofer, Clarinda; third, Celetha Haines, Ottumwa.

Plate of Other Dry Beans ($1, 75 cents, 50 cents)—First, Ross Van Ness, Ottumwa; second, Alice Beck, Ottumwa; third, Lester Moffit, Ottumwa.

Plate of String Beans ($1, 75 cents, 50 cents)—First, Alice Beck, Ottumwa; second, Myron La Pointe, Ottumwa; third, Maurice McDavitt, Ottumwa.

Head of Cabbage ($1, 75 cents, 50 cents)—First, Athol Smith, Ottumwa; second, Myron La Pointe, Ottumwa; third, Alice Beck, Ottumwa.

Cucumbers (Slicing) Three or Five ($1, 75 cents, 50 cents)—First, George Johnson, Clarinda; second, Florence Hunter, Ottumwa; third, Lorraine Criswell, Ottumwa.

Cucumbers (Ripe) ($1, 75 cents, 50 cents)—First, Mildred Shaffer, Clarinda; second, Charles McAlpin, Clarinda; third, James Landerback, Ottumwa.

Plate of Six Carrots ($1, 75 cents, 50 cents)—First, Evelyn Edmund. Ottumwa; second, Ralph Williamson, Clarinda; third, Athol Smith, Ottumwa.

Pop Corn (Six Ears) ($1, 75 cents, 50 cents)—First, Florence Hunter, Ottumwa; second, Nellie Bloom, Ottumwa; third, Max Masmar, Clarinda.

Sweet Corn (Six Ears) ($1, 75 cents, 50 cents)—First, Neal Rastofer, Clarinda; second, De Lass Loudon, Clarinda; third, Mima Adams, Clarinda.

Egg Plant ($1, 75 cents, 50 cents)—First, Fulton Neurock, Ottumwa; second, Lorraine Criswell, Ottumwa; third, Myron La Pointe, Ottumwa.

Plate of Six Onions (White) ($1, 75 cents)—First, George Johnson, Clarinda; second, Ross Van Ness, Ottumwa.

Plate of Six Onions (Red) ($1, 75 cents, 50 cents)—First, Oliver Welch, Clarinda; second, Max Masmar, Clarinda; third, Mima Adams, Clarinda.

Plate of Six Onions (Yellow) ($1)—First, Oliver Welch, Clarinda.

Parsnips, Plate of Six ($1, 75 cents, 50 cents)—First, Paul Menefee, Ottumwa; second, Nellie Bloom, Ottumwa; third, Fulton Neurock, Ottumwa.

Peppers, Red, Four Specimens ($1)—First, Marion Huff, Clarinda.

Peppers, Green, Four Specimens ($1, 75 cents, 50 cents)—First, Charles Green, Clarinda; second, Athol Smith, Ottumwa; third, Richard Kight, Ottumwa.

Pumpkins ($1, 75 cents, 50 cents)—First, Alice Beck, Ottumwa; second, Myron La Pointe, Ottumwa; third, Nellie Bloom, Ottumwa.

Plate of Six Potatoes, Early Ohios ($1, 75 cents, 50 cents)—First, Alice Lehman, Clarinda; second, Richard Kight, Ottumwa; third, Fulton Neurock, Ottumwa.

Plate of Any Other Variety ($1, 75 cents, 50c)—First, Charles McAlpin, Clarinda; second, Charles Carey, Ottumwa; third, Paul Menefee, Ottumwa.

Plate of Dry Peas ($1, 75 cents, 50 cents)—First, Max Masmar, Clarinda; second, Harloff Olson, Clarinda; third, Alice Beck, Ottumwa.

Plate of Six Tomatoes (Red) ($1, 75 cents, 50 cents)—First, Paul Menefee, Ottumwa; second, Lester Moffit, Ottumwa; third, Alice Beck, Ottumwa.

Plate of Six Tomatoes (Pink) ($1)—First, James Landerback, Ottumwa.

Plate of Six Tomatoes (Yellow) ($1, 75 cents, 50 cents)—First, Paul Menefee, Ottumwa; second, Howard Jones, Ottumwa; third, Myron La Pointe, Ottumwa.

Plate of Six Turnips ($1, 75 cents)—First, Richard Kight, Ottumwa; second, Clinton Edmonson, Ottumwa.

FARM RECORDS

JUDGES.. { J. WORKING, W. L. HARTER.

Farm Business Records (Entire Year) ($5, $3, $2, $2, $2, $1)—First, Georgia Denhart, Mt. Ayr; second, Helen Buck, Mt. Ayr; third, Addie Beall, Mt. Ayr; fourth, Wm. Fleming, Tingley; fifth, Geo. Kester, Tingley; sixth, Howard Horne, Mt. Ayr.

Farm Business Records (Seven Months) ($5, $4, $3, $2, $2, $2, $1, $1, $1, $1, $1, $1, $1)—First, Howard Klinetop, Charles City; second, Stanley Crook, Floyd; third, Clarence Hadenfeldt, Sioux Rapids; fourth, Malden Pullen, Whiting; fifth, David Way, Charles City; sixth, Keith G. Dempser, Grinnell; seventh, Donald Andrews, Adaza; eighth, Addie Beall, Mt. Ayr; ninth, Leroy Lesch, Rockford; tenth, Ruby Rivers, Charles City; eleventh, Vera McNally, Floyd; twelfth, Derald Boyd, Whiting; thirteenth, Alton Boyd, Whiting.

County Exhibit Records ($10, $7, $5)—First, Floyd County Farm Record Club, Charles City; second, Monona County Farm Record Club, Onawa; third, Ringgold County Farm Record Club, Mt. Ayr.

CLOTHING

Cotton School Dress Suitable for a Tall, Slender Girl ($4, $3, $2, $2, $2, $1)—First, Julia E. Brekke, Dewitt; second, Edna Rhoades, Sioux City; third, Julia E. Brekke, Dewitt; fourth, Laura L. Jones, Oskaloosa; fifth, Ralph Edwards, Clarion; sixth, Eloise Parsons, Winterset.

Cotton School Dress, Suitable for a Short, Very Stout Girl ($4, $3, $2, $2, $2, $1)—First, Norma Heald, Sioux City; second, Monona County Farm Bureau, Onawa; third, Avis Talcott, Malcom; fourth, Avis Talcott, Malcom; fifth, M. E. Olson, Eldora; sixth, Mrs. Edith Barker, Davenport.

Cotton School Dress, Suitable in Color for a Club Girl, Accompanied by Card Stating Color of Hair, Eyes and Complexion ($4, $3, $2, $2, $2, $1) —First, Avis Talcott, Malcom; second, Gladys Martin, Sioux City; third, Ruth English, Spencer; fourth, Montgomery County Farm Bureau, Red Oak; fifth, Avis Talcott, Malcom; sixth, Mrs. Edith Barker, Davenport.

Dress Suitable for Party Wear by Girls Aged 16 to 18 Years ($4, $3, $2, $2, $2, $1)—First, Monona County Farm Bureau, Onawa; second, Avis Talcott, Malcom; third, Monona County Farm Bureau, Onawa; fourth, Avis Talcott, Malcom; fifth, Mrs. Edith Barker, Davenport; sixth, Ralph Edwards, Clarion.

Outfit of Wash Dress and Hat to Match ($8, $5, $3, $2, $2)—First, Venus Merriam, Council Bluffs; second, Clara Anna Reid, Sioux City; third, Lillian Shaben, Council Bluffs; fourth, Margaret Morrissey, Anamosa; fifth, Lenora Grier, Van Clive.

Set of Three Pieces of Underwear, Suitable for Girls of Club Age Accompanied by Card Giving Age of Girl by Whom Garments Are to be Worn ($5, $4, $3, $2, $2, $2)—First, Monona County Farm Bureau, Onawa; second, Ralph Edwards, Clarion; third, Laura L. Jones, Oskaloosa; fourth, Edna Rhoades, Sioux City; fifth, Cass County Farm Bureau, Atlantic; sixth, Laura L. Jones, Oskaloosa.

Exhibit of Clothing for Girls of Club Age, Consisting of Two Different Undergarments, Two Articles of Outer Wearing Apparel and a Description of Girl Who Could Wear Same ($10, $8, $5, $3, $2, $2)—First, Laura L. Jones, Oskaloosa; second, Venus Merriam, Council Bluffs; third, Mrs. Edith Barker, Davenport; fourth, Monona County Farm Bureau, Onawa; fifth, Monona County Farm Bureau, Onawa; sixth, Helen Reid, Sioux City.

Corselette ($4, $3, $2, $1, $1)—First, Ben Walker, Maquoketa; second, Venus Merriam, Council Bluffs; third, Venus Merriam, Council Bluffs; fourth, Mrs. Edith Barker, Davenport; fifth, Laura L. Jones, Oskaloosa.

Child's Dress, Made by Using Sewing Machine Attachments ($3, $2, $2, $2, $1)—First, Mrs. Edith Barker, Davenport; second, Ralph Edwards, Clarion; third, Julia E. Brekke, Dewitt; fourth, F. R. Vinegar, Allison; fifth, Laura L. Jones, Oskaloosa.

Made Over Outer Garment ($5, $4, $3, $2, $2, $1)—First, Ida Johnson, Sioux City; second, Mrs. Edith Barker, Davenport; third Venus Merriam, Council Bluffs; fourth, Laura L. Jones, Oskaloosa; fifth, Eloise Parsons, Winterset; sixth, F. R. Vinegar, Allison.

Set of Two Posters Showing Silhouette of Artistic and Inartistic Hair Dress for Club Girls ($3, $2, $2, $1, $1)—First, Fremont County Girls Canning and Clothing Club, Farragut; second, Laura L. Jones, Oskaloosa; third, Mrs. Edith Barker, Davenport; fourth, Venus Merriam, Council Bluffs; fifth, Mrs. Edith Barker, Davenport.

Full Length Silhouette of Club Girl ($3, $2, $2, $1, $1)—First, Venus Merriam, Council Bluffs; second, Laura L. Jones, Oskaloosa; third, Fremont County Girls Canning and Clothing Club, Farragut; fourth, Edna Rhoades, Sioux City; fifth, Avis Talcott, Malcom.

Poster Showing Proper and Improper Footwear for Club Girls ($3, $2, $2, $1, $1)—First, Laura L. Jones, Oskaloosa; second, Mrs. Edith Barker, Davenport; third, Mrs. Edith Barker, Davenport; fourth, Venus Merriam, Council Bluffs; fifth, Donald Meinhard, Storm Lake.

HOUSE FURNISHING

JUDGE............................MARY ELLEN BROWN, Lincoln, Neb.

One Piece of Refinished Furniture ($10, $8, $6, $5)—First, Laura L. Jones, Oskaloosa; second, Madaline Chrisman, Eddyville; third, Laura L. Jones, Oskaloosa; fourth, Laura L. Jones, Oskaloosa.

One Braided Rag Rug ($3, $2, $2)—First, Mary Phillips, Eddyville; second, Edna Rhoades, Sioux City; third, Eloise Parsons, Winterset.

One Lampshade Suitable for a Girl's Room ($3, $2, $2, $1)—First, Laura L. Jones, Oskaloosa; second, Own Your Own Room Club, Eddyville; third, Edna Rhoades, Sioux City; fourth, The Jolly Six Club, Eddyville.

Floor Plan of Girl's Room With an Accompanying Drawing Showing How Room Might be Changed to Make It More Attractive, Useful and More Easily Cleaned ($3, $2, $2)—First Edna Rhoades, Sioux City; second, Own Your Own Room Club, Eddyville; third, Laura L. Jones, Oskaloosa.

Group of Three Articles Including Bed Spread, Curtains for One Window, Third Article Left to Choice of Exhibitor, All Suitable for Girl's Room and Accompanied by Card Giving Room Exposure and Color Scheme Chosen ($10, $8, $6, $5)—First, Eloise Parsons, Winterset; second, The Jolly Six Club, Eddyville; third, Own Your Own Room Club, Eddyville; fourth, Laura L. Jones, Oskaloosa.

CANNED PRODUCTS

JUDGE............................MARY ELLEN BROWN, Lincoln, Neb.

Exhibit of Canned Goods Which One Person Requires for One Year ($50, $35, $25, $15, $10, $6)—First, Laura L. Jones, Oskaloosa; second, Laura L. Jones, Oskaloosa; third, Eloise Parsons, Winterset; fourth, Eloise Parsons, Winterset; fifth, Ever Ready Canning Club, Grimes; sixth, Marshall County Canning Club, Albion.

County Exhibit of Six Jars Canned Meats ($8, $6, $5, $3, $2, $2, $2, $2)—First, Marshall County Canning Club, Albion; second, Edna Rhoades, Sioux City; third, Dorothy Wilson, Grimes; fourth, Bernice Ferrell, Des Moines; fifth, Cass County Farm Bureau, Atlantic; sixth, Pacia Cowgill, Grimes; seventh, T. R. Miner, Donnellson; eighth, T. R. Miner, Donnellson.

County Collection of Six Jars Canned Goods Which Will Make a Well Balanced Meal. Have a Menu Attached ($8, $6, $5, $3, $2, $2, $2, $2)—First, Eloise Parsons, Winterset; second, Marshall County Canning Club, Albion; third, Fremont County Girl's Canning and Clothing Club, Farragut; fourth, Eloise Parsons, Winterset; fifth, Gwen and Edna Simmons, Guthrie Center; sixth, Marshall County Canning Club, Albion; seventh, Mary McPherson, Des Moines; eighth, T. R. Miner, Donnellson.

County Collection of Six Jars of Canned Iowa Corn. Each Jar Containing a Different Variety of Corn or to Contain Different Combinations of Foods Having Corn as a Foundation ($8, $6, $5, $3, $2, $2)—First, Mary McPherson, Des Moines; second, Mildred Wilson, Grimes; third, Marshall County Canning Club, Albion; fourth, Mildred Wilson, Grimes; fifth, Fremont County Girls Canning and Clothing Club, Farragut; sixth, Fred Overly, Indianola.

ACCOUNTS

PERSONAL RECORDS

Actual Record of Personal Expenses Covering a Four Months' Period ($3, $2, $2, $2, $2)—First, Venus Merriam, Council Bluffs; second, Pauline M. Reynolds, Iowa City; third, Pauline M. Reynolds, Iowa City; fourth, Avis Talcott, Malcom; fifth, Avis Talcott, Malcom.

CLOTHING DEMONSTRATION

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

Clothing Demonstration Contest (Trip to International Stock Show, $20, $15, $10)—First, Pauline M. Reynolds, Iowa City; second, Mrs. Edith Barker, Davenport; third, Charlotte Kirchner, Muscatine; fourth, Julia E. Brekke, Dewitt.

HOUSE FURNISHING DEMONSTRATION

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

House Furnishing Demonstration Team Contest (Trip to International Stock Show, Trip to Mid-West Horticultural Show, $20, $15)—First, Edna Rhoades, Sioux City; second, Marshall County House Furnishing Demonstration Team, Marshalltown; third, Eloise Parsons, Winterset; fourth, Wapello County House Furnishing Demonstration Team, Ottumwa.

MEAL PLANNING AND SERVING

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

Meal Planning and Serving Demonstration Team Contest (Trip to International Stock Show, Trip to Mid-West Horticultural Show, $20, $15)—First, Lillian Shaben, Council Bluffs; second, Jones County Meal Planning Team, Anamosa; third, Emma Sparks, Vinton; fourth, Edna Rhoades, Sioux City.

BREAD MAKING DEMONSTRATION

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

Bread Making Demonstration Team Contest (Trip to International Stock Show, $20, $15, $10)—First, Lillian Shaben, Council Bluffs; second, Jones County Bread Team, Anamosa; third, C. C. Scott, Rockwell City; fourth, Cass County Farm Bureau, Atlantic.

CANNING DEMONSTRATION

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

Canning Demonstration Team Contest (Trip to International Live Stock Show, Trip to Mid-West Horticultural Show ($20, $15)—First, Marshall County Canning Demonstration Team, Marshalltown; second, M. H. White, Sioux City; third, Laura L. Jones, Oskaloosa; fourth, T. R. Miner, Donnellson.

CAKE MAKING DEMONSTRATION

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

Cake Making Demonstration Team Contest (Trip to International Live Stock Show, $20, $12, $10)—First, Jones County Cake Making Demonstrattio Team, Anamosa; second, Avis Talcott, Malcom; third, W. A. Geigher, Guthrie Center; fourth, Cass County Farm Bureau, Atlantic.

Home Economics Club Sweepstakes (Marshall County Silver Trophy)—Won by Mahaska County Home Economics Clubs.

CORN DEMONSTRATION

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

Corn Demonstration Team Contest ($15, $10)—First, Warren County Corn Demonstration Team, Indianola; second, Monona County Farm Bureau, Onawa.

APPLE SPRAYING DEMONSTRATION

JUDGE......................FLORENCE PACKMAN, Eagle Grove, Iowa.

Apple Spraying Demonstration Team Contest ($15, $10)—First, Story County Spraying Club; second, Warren County Spraying Club, Indianola.

GARDEN DEMONSTRATION

JUDGE............................C. B. WOODSTOCK, Mondamin, Iowa.

Garden Club Demonstration Team Contest ($15, $10)—First, Woodbury County Garden Club, Sioux City; second, Wapello County Garden Club, Ottumwa.

BEEF CLUB DEMONSTRATION

JUDGE..............................H. W. VAUGHN, St. Paul, Minn.

Beef Club Demonstration Team Contest ($15, $10, $10)—First, Boone County Beef Club, Boone; second, Muscatine County Beef Club, Muscatine; third, Grundy County Beef Club, Grundy Center.

POULTRY CLUB DEMONSTRATION

JUDGES.........................{ W. H. LAPP, Ames, Iowa.
H. E. BITTENBENDER, Ames, Iowa.

Poultry Demonstration Team Contest ($15, $10, $10)—First, Adams County Poultry Club, Corning; second, Appanoose County Poultry Club, Centerville; third, Polk County Poultry Club, Des Moines.

SHEEP CLUB DEMONSTRATION

JUDGE..................................P. S. SHEARER, Ames, Iowa.

Sheep Demonstration Team Contest ($25, $20, $15, $10)—First, Adams County Sheep Club, Corning; second, Poweshiek County Sheep Club, Malcom; third, Story County Pure Bred Ewe and Lamb Club, Ames; fourth, Jefferson County Sheep Club, Fairfield.

BOYS' AND GIRLS' JUDGING CONTEST

$600 Awarded in Scholarships ($175, $150, $125, $100, $25, $25)—First, Clarence Clark, Clarion; second, John Wells, Waterloo; third, Walter Weiss, Denison; fourth, Rowland Caldwell, Oskaloosa; fifth, Joe Bruns, Milford; sixth, Clyde Knight, Clarion.

BOYS' AND GIRLS' TEAM JUDGING CONTEST

First, Iowa Championship Judging Team, Trophy and free trip to the Interstate Fair at Sioux City, offered by the Interstate Fair Association; second to sixteenth, inclusive, $12.00 each paid by the Iowa State Fair)—First, Wright county; second, Franklin county; third, Grundy county; fourth, Buena Vista county; fifth, Dickinson county; sixth, Crawford county; seventh, Black Hawk county; eighth, Pocahontas county; ninth, Mitchell county; tenth, Warren county; eleventh, Polk county; twelfth, Henry county; thirteenth, Adair county; fourteenth, Muscatine county; fifteenth, Mahaska county; sixteenth, Woodbury county.

EDUCATIONAL DEPARTMENT

SUPERINTENDENT..F. A. WELCH.

JUDGES........................{ MRS. A. LOFTUS, Cedar Rapids, Iowa.
D. M. KELLEY, Colfax, Iowa.

DIVISION NO. 1

Rural School Work

Set of Eight Freehand Paper Cuttings by Two or More Pupils Developing form (Should be in Colored Paper) ($2.50, $1.55, $1)—First, Polk county, Carney Mining Camp; second, Dallas County, County College, Adel; third, Polk county, Norwoodville Camp, Des Moines.

Set of Four Freehand Cuttings by Two or More Pupils Illustrating Story ($2.50, $1.50, $1)—First, Polk County, Woodside Mining Camp; second, Polk County, Youngstown; third, Polk County, Center Beaver Township, Des Moines.

Set of Four Paper Foldings, or Paper Foldings and Construction, by Two or More Pupils ($2.50, $1.50, $1)—First, Polk County, Cambell Rural, Des Moines; second, Polk County, Hicks Rural, Des Moines; third, Polk County, Ward School, Allen Township, Des Moines.

Set of Four Number Papers by Each of Two Pupils ($2.50, $1.50, $1)—First, Fremont County, Sidney, Iowa; second, Polk County, Norwoodville Mining Camp, Des Moines; third, Cerro Gordo County, County College, Mason City, Iowa.

Set of Six Free-hand Cuttings, for Poster Effects (Colored Paper) by Two or More Pupils ($2.50, $1.50, $1)—First, Polk County, Pine Grove Rural, Des Moines; second, Palo Alto County, County College, Emmetsburg; third, Dallas County, County College, Adel.

Drawing in Crayon or Water Colors, to Develop Form, Such as Fruits or Other Object Forms, by Two or More Pupils ($2.50, $1.50, $1)—First, Dallas County, County College, Adel; second, Palo Alto County, County College, Emmetsburg; third, Cerro Gordo County, County College, Mason City.

Set of Four Booklets or Other Pieces of Simple Construction by Two or More Pupils ($2.50, $1.50, $1)—First, Clayton County, Elkader; second, Polk County, Youngstown; third, Polk County, Hicks Rural, Des Moines.

Set Spelling Papers from Actual Class Work, by Each of Four Pupils ($2.50, $1.50, $1)—First, Polk County, Pine Grove Rural School, Des Moines; second, Jefferson County, Fairfield; third, Fremont County, Sidney.

Set Illustrated Number Papers from Each of Four Pupils ($2.50, $1.50, $1)—First, Polk County, Oralabor Mining Camp; second, Jasper County, Newton; third, Cerro Gordo County, County College, Mason City.

Map of County by Each of Four Pupils ($2.50, $1.50, $1)—First, Palo Alto County, County College, Emmetsburg; second, Dallas County, County College, Adel; third, Polk County, Oralabor Mining Camp.

Set Two Dressed Dolls, by Each of Two Pupils ($2.50, $1.50, $1)—First, Fremont County, Sidney; second, Dallas County, County College, Adel; third, Polk County, Oralabor Mining Camp.

Set Eight Studies in Form and Objects in Composition, Crayon or Water Color, By Two or More Pupils ($2.50, $1.50)—First, Cerro Gordo County, County College, Mason City; second, Dallas County, County College, Adel.

Set Four Landscapes, Black and White, Color or Paper, By Two or More Pupils ($2.50, $1.50)—First, Dallas County, County College, Adel; second, Palo Alto County, County College, Emmetsburg.

Set Four Posters to Promote Civic Beauty or Kindness to Animals, By Two or More Pupils ($2.50, $1.50)—First, Polk County Ward School, Allen Township, Des Moines; second, Cerro Gordo County, County College, Mason City.

Set Spelling Papers From Actual Class Work, By Each of Four Pupils ($2.50, $1.50, $1)—First, Fremont County, Sidney; second, Jefferson County, Fairfield; third, Polk County, Norwoodville Camp, Des Moines.

Set Illustrated Number Papers, By Each of Four Pupils ($2.50)—First, Cerro Gordo County, County College, Mason City.

Map of Iowa, By Each of Four Pupils ($2.50, $1.50)—First, Fremont County, Sidney; second, Dallas County, County College, Adel.

Product Map of United States, By Pupil or School ($2.50, $1.50, $1)—First, Dallas County, County College, Adel; second, Jasper County, Newton; third, Polk County, Pleasant Valley, Des Moines.

Collection of Ten or More Iowa Woods (Named and Mounted, Showing Bark and Grain) By Pupil or School ($2.50, $1.50, $1)—First, Clayton County, Elkader; second, Warren County, County College, Indianola; third, Jefferson County, Fairfield.

Water Color, Ten Iowa Birds, Showing Habits, Nests, Etc., By Pupil or School ($2.50, $1.50)—First, Cerro Gordo County, County College, Mason City; second, Polk County, Hicks Rural School, Des Moines.

Set Two Posters to Promote Citizenship, Involving Pose and Costumes, By Two Pupils ($2.50, $1.50)—First, Cerro Gordo County, County College, Mason City; second, Jefferson County, Fairfield.

Set of Two Drawings or Posters to Promote Home and Community Sanitation and Civic Beauty, By Each of Two Pupils ($2.50, $1.50, $1)—First, Cerro Gordo County, County College, Mason City; second, Dallas County, County College, Adel; third, Clayton County, Elkader.

Set of Two Drawings From Objects, Interior or Landscape, Involving the Principles of Perspectives (Black and White or In Color or Paper) By Two or More Pupils ($2.50, $1.50, $1)—First, Jasper County, Newton; second, Dallas County, County College, Adel; third, Fremont County, Sidney.

Set Page Specimens of Penmanship, By Each of Four Pupils ($2.50, $1.50, $1)—First, Cerro Gordo County, County College, Mason City; second, Palo Alto County, County College, Emmetsburg; third, Fremont County, Sidney.

Six Drawings In Physiology, By Each of Four Pupils ($2.50, $1.50, $1) First, Dallas County, County College, Adel; second, Palo Alto County, County College, Emmetsburg; third, Warren County, County College, Indianola.

Collection Ten or More Iowa Grains and Grasses (Named and Arranged) By Pupil or School ($2.50)—First, Fremont County, Sidney.

Collection Ten or More Troublesome Weeds of Garden or Farm (Named and Arranged) By Pupil or School ($2.50)—First, Fremont County, Sidney.

Set Ten or More Useful Knots, Named With Statement of Some Good Place to Use Each and Why, Rope ¼ to ½ Inch In Size, By Pupil or School ($2.50, $1.50, $1)—First, Dallas County, County College, Adel; second, Fremont County, Sidney; third, Warren County, County College, Indianola.

Essay on Subject "Good Citizenship" By Each of Four Pupils ($2.50, $1.50) —First, Polk County, Oralabor Mining Camp; second, Dallas County, County College, Adel.

Wood Work Collection, Including Toys, Etc., By Pupil or School ($2.50, $1.50, $1)—First, Jasper County, Newton; second, Ringgold County, Mt. Ayr; third, Polk County, County College, Des Moines.

Illustrated Booklet, Any Subject ($2.50, $1.50, $1)—First, Polk County, Marquisville Mining Camp; second, Jefferson County, Fairfield; third, Cerro Gordo County, County College, Mason City. .

DIVISION NO. 2

Graded School Work

Free-hand Paper Cuttings to Develop Form, In Colored Paper, By Eight Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Hamilton County, Kamrar; third, Polk County, Bondurant.

Free-hand Paper Cuttings Illustrating Story, By Eight Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Hamilton County, Kamrar; third, Shelby County, St. Josephs School, Earling.

Paper Foldings or Paper Foldings and Construction, By Eight Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Polk County, Runnells; third, Polk County, Bondurant.

Drawing In Crayon or Water Color, to Develop Form, By Eight Pupils ($2 50, $1.50, $1)—First, Hamilton County, Kamrar; second, Polk County, Runnells; third, Polk County, Urbandale School, Des Moines.

Set Two Dressed Dolls, By Two Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Hamilton County, Kamrar; third, Fayette County, Oelwein.

Studies in Form and Objects in Composition (Crayon or Water Color) By Eight Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Johnson County, Oxford; third, Polk County, Runnells.

Landscapes, Black and White or in Color, By Four Pupils ($2.50, $1.50, $1)—First, Polk County, Bondurant; second, Hamilton County, Kamrar; third, Fayette County, Oelwein.

Posters to Promote Civic Beauty of Kindness to Animals, By Four Pupils ($2.50, $1.50, $1)—First, Adair County, Orient; second, Shelby County, Earling; third, Hamilton County, Kamrar.

Booklets and Other Forms of Construction, Involving Elements of Binding, By Four Pupils ($2.50, $1.50, $1)—First, Hamilton County, Kamrar; second, Polk County, Bondurant; third, Polk County, Runnells.

Set Spelling Papers From Actual Class Work, By Each of Four Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Fayette County, Oelwein; third, Adair County, Orient.

Set Page Specimens of Penmanship, By Each of Four Pupils ($2.50, $1.50, $1)—First, Polk County, Runnells; second, Adair County, Orient; third, Fayette County, Oelwein.

Set Illustrated Number Papers, By Each of Four Pupils ($2.50, $1.50, $1)—First, Polk County, Urbandale, Des Moines; second, Johnson County, Oxford; third, Polk County, Bondurant.

Health Poster 10x12 Inches, By Each of Four Pupils ($2.50, $1.50, $1)—First, Adair County, Orient; second, Fayette County, Oelwein; third, Appanoose County, Centerville.

Map of Iowa, By Each of Two Pupils ($2.50, $1.50, $1)—First, Hamilton County, Kamrar; second, Shelby County, Earling; third, Webster County, Callender.

Map of County, By Each of Two Pupils ($2.50, $1.50, $1)—First, Hamilton County, Kamrar; second, Polk County, Bondurant; third, Webster County Callender.

Product Map of United States, By Pupil or School ($2.50. $1.50, $1)—First, Cedar County, Stanwood; second, Polk County, Bondurant; third, Hamilton County, Kamrar.

Collection Ten or More Iowa Woods (Named and Mounted, Showing Bark and Grain) By Pupil or School ($2.50, $1.50, $1)—First, Hamilton County, Kamrar; second, Polk County, Bondurant; third, Warren County, Indianola.

Set Language Papers, Illustrated By Each of Six Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Polk County, Bondurant; third, Adair County, Orient.

Original Poem of Not Fewer Than Four Stanzes, By Pupil ($2.50, $1.50, $1)—First, Appanoose County, Centerville; second, Hamilton County, Kamrar; third, Cedar County, Stanwood.

Posters to Promote Citizenship, Involving Pose and Costuming, By Each of Four Pupils ($2.50)—First, Hamilton County, Kamrar.

Drawings or Posters to Promote Community Sanitation and Civic Beauty, By Each of Four Pupils ($2.50, $1.50, $1)—First, Polk County, Farrar; second, Hamilton County, Kamrar; third, Adair County, Orient.

Drawings From Objects, Interior or Landscape, Involving Principles of Perspective (Black and White, or In Color) By Each of Eight Pupils ($2.50, $1.50, $1)—First, Fayette County, Oelwein; second, Dallas County, Waukee; third, Polk County, Runnells.

Construction In Cardboard Involving Covering, Lining and the Simple Elements of Binding, Such As Book Cover, Kodak or Post Card Album. Calendar, Scrap Basket, Etc., By Each of Four Pupils ($2.50, $1.50)—First, Polk County, Bondurant; second, Polk County, Runnells.

Six Drawings In Physiology, By Each of Four Pupils ($2.50, $1.50, $1)—First, Appanoose County, Centerville; second, Fayette County, Oelwein; third, Polk County, Bondurant.

Collection Ten or More Iowa Grains and Grasses (Named and Arranged) By Pupil or School ($2.50, $1.50, $1)—First, Warren County, Liberty Center; second, Hamilton County, Kamrar; third, Adair County, Orient.

Collection Ten or More Troublesome Weeds of Garden or Farm (Named and Arranged by Pupil or School ($2.50, $1.50, $1)—First, Adair County, Orient; second, Dallas County, Waukee; third, Polk County, Bondurant.

Set Ten or More Useful Knots, Named, With Statement of Some Good Place to Use Them and Why, Rope ¼ to ½ Inch In Size, By Pupil or School ($2.50, $1.50, $1)—First, Washington County, Washington; second, Johnson County, Oxford; third, Adair County, Orient.

Set Three Samples of Darning, By Each of Three Pupils ($2.50, $1.50)—First, Dallas County, Waukee; second, Hamilton County, Kamrar.

Collection Three Garments Made by Each of Three Pupils ($2.50, $1.50, $1)—First, Hamilton County, Kamrar; second, Cedar County, Stanwood; third, Dallas County, Waukee.

Original Poem of Not Fewer Than Four Stanzas, By Pupil ($2.50, $1.50, $1)—First, Webster County, Callender; second, Dallas County, Waukee; third, Adair County, Orient.

Essay on Subject "Good Citizenship," By Each of Four Pupils ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Polk County, Bondurant.

Collection of Wood Work Including Toys, Etc., By Pupil or School ($2.50, $1.50, $1)—First, Polk County, Bondurant; second, Dallas County, Waukee; third, Hamilton County, Kamrar.

Set United States Maps Showing Territory and Growth, By Each of Four Pupils ($2.50, $1.50, $1)—First, Adair County, Orient; second, Hamilton County, Kamrar; third, Johnson County, Oxford.

Illustrated Booklet, Any Subject ($2.50, $1.50, $1)—First, Fayette County, Oelwein; second, Palo Alto County, Emmetsburg; third, Fremont County, Sidney.

DIVISION NO. 3

High School Work

Set Agriculture Notebooks, One by Each of Four Students ($2.50, $1.50 $1)—First, Webster County, Lanyon; second, Polk County, Bondurant; third, Hamilton County, Kamrar.

Set Physics Notebooks, One by Each of Four Students ($2.50, $1.50, $1)—First, Polk County, Bondurant; second, Polk County, Runnells; third, Adair County, Orient.

Set History Notebooks, One by Each of Four Students ($2.50, $1.50, $1)—First, Polk County, Bondurant; second, Hamilton County, Kamrar; third, Dallas County, Waukee.

Set Geometrical Propositions With Demonstrations and Drawing, One By Each of Four Students ($2.50, $1.50, $1)—First, Story County, Nevada; second, Adair County, Orient; third, Polk County, Farrar.

Set Papers on Topic "How My Home Economics Work Has Been Applied In the Home," One By Each of Four Students ($2.50, $1.50)—First, Polk County, Farrar; second, Webster County, Callender.

Set Charcoal Drawings, One By Each of Four Students ($2.50)—First, Polk County, East High, Des Moines.

Set Water Colors, One By Each of Four Students ($2.50, $1.50)—First, Dallas County, Waukee; second, Polk County, East High, Des Moines.

Set Drawings, Shades and Shadows, Any Medium, One By Each of Four Students ($2.50, $1.50)—First, Polk County, East High, Des Moines; second, Dallas County, Waukee.

Set of Designs for Book Cover, One By Each of Four Students ($2.50, $1.50)—First, Polk County, East High, Des Moines; second, Hamilton County, Kamrar.

Set of Posters on Health or Sanitation, One By Each of Four Students ($2.50, $1.50, $1)—First, Polk County, East High, Des Moines; second, Dallas County, Waukee; third, Hamilton County, Kamrar.

Collection Ten or More Iowa Weeds (Named and Arranged) Showing Bark, Grain and Heart, By Student or School ($2.00, $1.50)—First, Hamilton County, Kamrar; second, Shelby County, Earling.

Collection Ten or More Troublesome Weeds (Named and Arranged) By Student or School ($2.50, $1.50, $1)—First, Harrison County, Missouri Valley; second, Dallas County, Waukee; third, Shelby County, Earling.

Collection Showing Six or More Insects (Named and Mounted) Showing Effects of Work of Insect, By Student or School ($2.50)—First, Hamilton County, Kamrar.

Collection of Important Current Events Including Cartoons, Etc., By Student or School ($2.50, $1.50, $1)—First, Webster County, Lanyon; second, Dallas County, Waukee; third, Hamilton County, Kamrar.

Set Maps Showing Important Phases of American History or Foreign History, By Each of Four Students ($2.50, $1.50, $1)—First, Hamilton County, Kamrar; second, Polk County, Farrar; third, Humboldt County, Bradgate.

Original Poem, Not Fewer Than Six Stanzas, By Student ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Hamilton County, Kamrar; third, Webster County, Callender.

Essay on Subject "Why Nations Should Prefer Peace, and How," By Student ($2.50, $1.50, $1)—First, Polk County, Bondurant; second, Cedar County, Stanwood; third, Hamilton County, Kamrar.

Best Kept Bookkeeping Set of Books, By Each of Four Students ($2.50) First, Shelby County, Earling.

Best Sketch of Home School Plant Including Buildings and Grounds, By Each of Two Students ($2.50, $1.50, $1)—First, Dallas County, Waukee; second, Hamilton County, Kamrar; third, Polk County, Farrar.

Essay on Topic "Best Solution for Foreign Immigration Question," By Student ($2.50, $1.50, $1)—First, Cedar County, Stanwood; second, Polk County, Bondurant; third, Hamilton County, Kamrar.

Exhibit of Pen Art Work, Any Division ($2.50, $1.50, $1)—First, Polk County, East High, Des Moines; second, Appanoose County, Centerville; third, Dallas County, Waukee.

Illustrated Booklet, Any Subject ($2.50, $1.50, $1)—First, Hamilton County, Kamrar; second, Polk County, Bondurant; third, Humboldt County, Bradgate.

DIVISION NO. 4.

Manual Arts.

Set Mechanical Drawings, One by Each of Four Students ($4, $3, $1)—First, Appanoose County, Centerville; second, Cedar County, Stanwood; third, Dallas County, Waukee.

Set Small Articles in Wood Work, by Student or School ($4, $3)—First, Dallas County, Waukee; second, Polk County, Bondurant.

Set Large Articles in Woodwork (Furniture, Etc.), by Student or School ($4, $3, $1)—First, Dallas County, Waukee; second, Polk County, Bondurant; third, Polk County, Runnells.

Set Useful Articles in Wood Turning, One by Each of Three Students ($4) —First, Appanoose County, Centerville.

Set House Dresses, One by Each of Four Students ($4,. $3)—First, Polk County, Bondurant; second, Dallas County, Waukee.

Booklet on "School Girl's Wardrobe" (Should Illustrate Complete Wardrobe for a Year) One by Each of Four Students ($4, $3, $1)—First, Polk County, Bondurant; second, Hamilton County, Kamrar; third, Dallas County, Waukee.

Display of Millinery Work, by Each of Four Students ($4, $3)—First, Dallas County, Waukee; second, Polk County, Farrar.

Drawing of Best Arranged Kitchen, With Reasons Given for Such Arrangement, One From Each of Four Students ($4)—First, Dallas County, Waukee.

List of Menus for Average Family for One Week (State Whether for Rural, Small Town or City Conditions), One by Each of Four Students ($4, $3)—First, Polk County, Bondurant; second, Adair County, Orient.

Drawing From Some Actual Farmstead in Neighborhood, One From Each of Three Students ($4)—First, Hamilton County, Kamrar.

Applied Record for Farm Crops Class, One From Each of Three Students ($4, $3, $1)—First, Polk County, Bondurant; second, Clayton County, Strawberry Point; third, Warren County, Liberty Center.

Selected Exhibit in Manual Training, by Student or School ($4, $3, $1)—First, Dallas County, Waukee; second, Polk County, Bondurant; third, Story County, McCallsburg.

Selected Exhibit in Domestic Science, by Student or School ($4, $3, $1)—First, Dallas County, Waukee; second, Polk County, Runnells; third, Polk County, Bondurant.

Three Designs in Pen Art Work by Student or School ($4)—First, Dallas County, Waukee.

Best Display of Printing Done by School (May Include Job Printing, School Paper, Etc., but Not "High School Annual") ($4)—First, Hamilton County, Kamrar.

DIVISION NO. 5.

Manual Arts.

Exhibit of Photographs by Rural One-Room School ($5, $3)—First, Jasper County, Newton; second, Cerro Gordo County, Mason City.

Exhibit of Photographs by Consolidated School ($8, $5, $2)—First, Boone County, Jordon; second, Dallas County, Waukee; third, Polk County, Bondurant.

Exhibit of Photographs by Other Systems of Schools, in Towns of Less Than Five Thousand Population ($8)—First, Hamilton County, Kamrar.

DIVISION NO. 6.

Collective Exhibits.

Rural One-Room School Making Collective Exhibit, Entry by Teacher or by County Superintendent ($8, $6, $4)—First, Pottawatamie County, Council Bluffs; second, Dallas County, Adel; third, Jefferson County, Fairfield.

Standard Rural One-Room School Making Collective Exhibit, Entry by Teacher or by County Superintendent ($8, $6, $4, $2)—First, Jasper County, Newton; second, Warren County, Indianola; third, Jefferson County, Fairfield; fourth, Polk County, Hicks, Des Moines.

Mining Camp School (Must be School so Recognized by State Department of Public Instruction), Exhibit Must be Confined to Grade Work; Entry by Teacher or Superintendent ($8, $6, $4, $2)—First, Polk County, Oralabor Mining Camp; second, Polk County, Marquisville Mining Camp; third, Polk County, Carney Mining Camp; fourth, Polk County, Norwoodville Mining Camp, Des Moines.

Consolidated School Making Collective Exhibit, Entry by Superintendent ($20, $15, $10, $5)—First, Dallas County, Waukee; second, Adair County, Orient; third, Polk County, Bondurant; fourth, Warren County, Liberty Center.

Town School (Other Than Consolidated and of Less Than Two Thousand Population) Making Collective Exhibit, Entry by Superintendent ($20,

$15, $10, $5)—First, Hamilton County, Kamrar; second, Webster County, Callender; third, Worth County, Joice; fourth, Mahaska County, Fremont.

County Making Collective Exhibit of Rural One-Room Work, Entry by County Superintendent ($20, $15, $10, $5)—First, Cerro Gordo County, Mason City; second, Jasper County, Newton; third, Jefferson County, Fairfield; fourth, Warren County, Indianola.

BABY HEALTH DEPARTMENT.

SUPERINTENDENT................MRS. S. E. LINCOLN, Des Moines, Iowa

RURAL.

Boys, 12-24 Months—First, Willis McBride, Polk City, 95.3; second, Richard Handsaker, Nevada, 94.8; third, Wilford B. Burkett, Minburn, 93.7; fourth, John Herwehe, Monroe, 93.4.

Boys, 24-36 Months—First, Victor E. Swift, Gilman, 95.5; second, Harold Morris, Waukee, 93.6; third, Max Richards, Swan, 92.5; fourth, Clarence Moffitt, Ashworth, 92.

Girls, 12-24 Months—First, Mary Steggall, Murray, 95.5; second, Christine Daniel, Murray, 94.6; third, Evelyn McClaine, Adelphi, 94.5; fourth, Mary Largent, Valley Junction, 94.4.

Girls, 24-36 Months—First, Doris Vaughn, Rolfe, 95.5; second, Nedra Burkhardt, Stratford, 95.3; third, Jane Bullington, Runnells, 94.3; fourth, Margaret Masters, Beacon, 93.8.

CITIES LESS THAN 10,000.

Boys, 12-24 Months—First, John Weaver, Ames, 96.2; second, Leon Heckert, Ames, 95.75; third, Don Minert, Ames, 95.75; fourth, Lyman Roberts, Corydon, 94.6.

Boys, 24-36 Months—First, Richard Hummell, Ames, 96.1; second, Lyle Sterrett, What Cheer, 95.8; third, Roy Houser, Centerville, 95.7; fourth, George Munger, Osage, 94.1.

Girls, 12-24 Months—First, Betty King, Clear Lake, 97.2; second, Martha Harvey, Adel, 96.6; third, Janice Hamilton, Indianola, 95.5; fourth, Marian Flint, Humboldt, 94.9.

Girls, 24-36 Months—First, Josephine Gripp, Afton, 99.1; second Elizabeth Young, Waukee, 97.7; third, Delberta Olafson, Stanhope, 95.8; fourth, Marjorie Morrill, Waukee, 95.6.

CITIES OVER 10,000.

Boys, 12-24 Months—First, Hubert Roe James, Des Moines, 96.5; second, John E. Hanson, Des Moines, 96.4; third, John R. Jones, Des Moines, 96; fourth, Joel Boersema, Des Moines, 95.9.

Boys, 24-36 Months—First, Earl W. Olson, Des Moines, 95.5; second, Benton Van Horn, Des Moines, 95.2; third, Keith Kelley, Des Moines, 93.5; fourth, John Robert Liggett, Des Moines, 93.4.

Girls, 12-24 Months—First, Joy Haskins, Des Moines, 96.1; second, Mary H. Macomber, Des Moines, 94.6; third, Marjorie Way, Des Moines, 93.9; fourth, Ruth Agnes Corey, Des Moines, 93.8.

Girls, 24-36 Months—First, Doris Strater, Des Moines, 95.4; second, Dorothy Dyson, Des Moines, 95.3; third, Jean Fluke, Des Moines, 95.2; fourth, Gwendolyn McCannon, Des Moines, 95.1.

Sweepstake Boy, 12-36 Months—Hubert Roe James, Des Moines, 96.5.

Sweepstake Girl, 12-36 Months—Josephine Gripp, Afton, 99.1.

IMPROVEMENT CLASS.

Rural.

Boys, 24-36 Months.

	Score	Gain
First, Dwight Moser, Dallas Center	91.9	2.1
Second, Clarence E. Moffitt, Ackworth	92.	1.9
Third, Max Jack Richards, Swan	92.5	1.8
Fourth, Gordon McConnell, Waukee	88.9	1.7

Girls, 24-36 Months.

	Score	Gain
First, Nedra Ione Burkhardt, Stratford	95.3	1.4
Second, Jean Louise Shelhart, Ankeny	92.3	.2

CITIES LESS THAN 10,000.

Boys, 24-36 Months.

	Score	Gain
First, W. Ray Houser, Centerville	95.7	5.1
Second, George Kellar, Huxley	92.	.3

Girls, 24-36 Months.

	Score	Gain
First, Marjorie Morrill, Waukee	95.6	4.8
Second, Janice Fardal, Stanhope	88.	4.5
Third, Esther Iverson, Stanhope	93.5	2.2
Fourth, Norma Crowder, Grinnell	92.8	.9

CITIES OVER 10,000.

Boys, 24-36 Months.

	Score	Gain
First, Robert Briggs Frink, Des Moines	90.4	4.5
Second, William Henry Marshall, Des Moines	92.8	1.8

Girls, 24-36 Months.

	Score	Gain
First, Margery Emma Hart, Des Moines	93.6	5.
Second, Doris Janet Strater, Des Moines	95.4	.6
Third, Lilla Rossiter, Des Moines	92.9	.1

Improvement Champions.

	Score	Gain
Champion Boy, W. Ray Houser, Centerville	95.7	5.1
Champion Girl, Emma Margery Hart, Des Moines	93.6	5.

HORSESHOE PITCHING TOURNAMENT.

MEN'S NATIONAL HORSESHOE PITCHING TOURNAMENT.

Gold medal and $250, Gold Medal and $150, Gold Medal and $100, $75, $50, $40, $35, $30, $25, $25, $20, $20, $20, $20, $20, $20—First, Frank Lundin; New London; second Frank Jackson, Kellerton; third, Lyle Brown, Des Moines; fourth, R. P. Spencer, Picher, Okla.; fifth, E. R. Plogman, Conroy; sixth, Billy Crick, Independence, Mo.; seventh, Harold Taylor, Akron, Ohio; eighth, Geo. May, Akron, Ohio; ninth, C. C. Davis, Columbus, Ohio; tenth, Elzie Ray, Shenandoah, eleventh, H. E. Jackson, Kellerton; twelfth, Christ Erickson, Beresford, S. D.; thirteenth, J. F. Walls, Missouri Valley; fourteenth, E. M. Crank, Wilburn, Ill.; fifteenth, P. W. Bair, Kansas City, Kan.; sixteenth, C. F. Jackson, Kellerton.

WOMEN'S NATIONAL HORSESHOE PITCHING TOURNAMENT.

Gold Medal and $25, Gold Medal and $20, Gold Medal and $15, $10, $10, $10, $5, $5—First, Mrs. C. A. Lanham, Bloomington, Ill.; second, Mrs. Mayme Francisco, Muskegon, Mich.; third, Mrs. C. D. Young, Minneapolis, Minn.; fourth, Mrs. Chas. Heimbaugh, Akron, Ohio; fifth, Mrs. Alex Cumming, Minneapolis, Minn.; sixth, Mrs. John Dahl, Minneapolis, Minn.; seventh, Mrs. G. Brouillette, Minneapolis, Minn.; eighth, Mrs. Allen Hay, Minneapolis, Minn.

MEN'S IOWA STATE HORSESHOE PITCHING TOURNAMENT.

Gold Medal and $75, Silver Medal and $40, $30, $25, $25, $20, $20, $15—First, Frank Lundin, New London; second, Lyle Brown, Des Moines; third, E. R. Plogman, Conroy; fourth, Elzie Ray, Shenandoah; fifth, O. H. Raines, Knoxville; sixth, Claus Hoodjer, Wellsburg; seventh, H. H. Holmes, Storm Lake; eighth, Geo. Rogers, Newell.

SPELLING CONTEST.

Gold Medal and $25, Silver Medal and $15, $10, $10, $10, $10, $10, $10, $10, $10, $5, $5, $5, $5, $5, $5, $5, $5—First, Lyle Pleshek, State Center; second, Beulah Gorden, Centerville; third, Mary Scott, Lacey; fourth, Thorvald Jessen, Dolliver; fifth, Gertrude Vanderpol, Sully; sixth, Hilda Palmquist, Knoxville; seventh, Thorvald Peterson, Storm Lake; eighth, Dorothy Reiff, Danville; ninth, Harold Kearns, Fairfield; tenth, Charles Reading, Churdan; eleventh, Raymond Shulz, Fort Dodge; twelfth, Blanche Pierce, Iowa Falls; thirteenth, Anna Ketelsen, Bryant; fourteenth, Nora Floistad, Ossian; fifteenth, Earl Crawford, Arlington; sixteenth, Darwin C. Rogers, Oakland; seventeenth, Mary T. Pigott, Waukon; eighteenth, Cleone Caldwell, Washington.

PART V

Fourth Annual Convention, Iowa Farm Bureau Federation, Des Moines, Iowa, January 11-12, 1923

EXCERPTS FROM THE OPENING ADDRESS

BY PRESIDENT C. W. HUNT

The Iowa Farm Bureau Federation has justified its four years of existence, four years that tried the metal of the farmer to the limit of endurance. It has demonstrated to the world that its mission was to promote and protect the interests of the Iowa farmer. The organization came into being when every one was drunk with the seeming prosperity that followed in the wake of war. Speculation was in the air, and everyone breathed its intoxicating aroma. Promoters seized the opportunity to induce the Iowa farmer to invest his money and liberty bonds in questionable stock and worthless securities, with the result that millions of dollars were taken away from agriculture and squandered. It was your state organization that first sensed the danger, and its influence in sounding the alarm through the county Farm Bureaus was an important factor in bringing an end to this unexampled period of extravagance and financial waste.

Cost Accounting Project Proves Value

Believing in the theory that the thrifty and industrious farmer is entitled to cost of production plus a fair profit, the Iowa Farm Bureau Federation, co-operating with the Iowa State College, took up the study of cost accounting on the farm. Today we have three years of cost-of-production figures on Iowa farms that have furnished an unanswerable argument to convince the rest of the world that the farmer must have a higher price level and a larger buying power or go under.

These figures were introduced as evidence by Secretary Cunningham and Dr. E. G. Nourse of the Iowa State College, and clinched the argument before the Interstate Commerce Commission hearing in the grain rate reduction case, and were largely responsible for a reduction of 17½ per cent in freight rates on grain and hay.

Legislative Activities Many and Effective

In the field of legislation the Federation was instrumental in defeating a measure which would have placed a large additional burden of taxes upon farm lands; it defeated the enactment of a sales tax; declared that taxes should be paid out of income, instead of out of capital; legalized co-operative marketing, in order that farmers might co-operate in selling their products without danger of being jailed; provided financial relief for crop failure in the northwest; brought to life the War Finance Corporation that it might loan money to tide agriculture over the period of financial stringency; forced the enactment of the Haugen Packer-Stock Yards Control Act which had been buried in the committee for years; passed the Capper-Tincher Grain Act; set in motion a program of farm-to-market highways that would give the farmer a good road to his town, rather than an ocean-to-ocean thoroughfare for the tourist. Many other agricultural bills are under consideration. In addition to national legislation some of the states have been active in behalf of agriculture, Iowa in particular taking the lead two years ago by passing eighteen bills designed to improve conditions for the farmers of the state.

Organize Credit Corporation

We early decided that a system of agricultural credit, national and state, should be worked out, and we found that special legislation was necessary before anything could be done in that line. Accordingly laws were enacted by the Thirty-ninth General Assembly of Iowa legalizing a state agricultural finance corporation, following which the Iowa Farm Bureau Federation co-operated with the Iowa State Bankers' Association in organizing the Iowa Farm Credit Corporation.

Organization of this corporation was undertaken with the indorsement of bankers all over the country, from Des Moines to Chicago and Washington. But there came a change. Indorsement was withdrawn. Approval changed to opposition. Financiers evidently feared the new plan would advance the independence of the farmer and give him cheaper credit, and they began to use every possible opportunity to discredit the plan and hamper the promotion work of the corporation.

Lowered Rate of Interest on Loans

But the work went on. In spite of organized opposition from every side the required amount of stock was sold, all legal requirements complied with, and today the corporation is doing business under a charter from the State of Iowa. It is not doing the volume of business it should do, and would do if it had the support it is entitled to from financial interests. But with all the handicaps it has had the effect of lowering interest rates on farm loans at least 1 per cent throughout the state, and in many cases has lowered interest rates on short-time loans.

So we can say the Iowa Farm Credit Corporation is a going concern. Its capital is working for the Iowa farmer. It is not overstating the truth to say that the credit corporation has saved more than a million dollars to the farmers of the state within the last year. With proper support from the farmers it will do much more in the years to come. The corporation has no high-salaried officers, and the entire expense of promotion from beginning to date has cost less than 10 per cent of the capital stock sold. All claims and expenses are paid, and there is a healthy surplus on hand.

Livestock Marketing Plans Perfected

Since our last meeting a year ago the Livestock Marketing Plan has been put in active operation with selling agencies at St. Louis, Peoria, Chicago, Indianapolis and Buffalo. Every one of these agencies has made rapid progress, and today they hold first place in their respective markets. They are a success in every way, and should have better support from farmers and feeders than they have received so far. You want co-operative marketing, and you should have it as fast as it can be intelligently worked out, but you must support it when offered if it is to succeed. The Iowa Farm Bureau Federation has done its full share in establishing a co-operative marketing system for livestock, both in lending money and in the administration of its affairs.

One year ago I said I would like to offer you a word of encouragement for the immediate future, but suggested that the business world was too sick to recover soon. In the sense that I intended it that statement proved true. The business world is still sick. No man can tell when or how far the European countries will come back. Let us hope that they will be able to regain their economic balance and adopt a program of thrift and industry. If they do they will come back rapidly, and eventually pay their debts to the United States. They must work out their own salvation, or at least show us that they are in earnest for the good of all before we can afford to lend more assistance toward their recovery. Confidence will come to the business interests of the United States the minute it is felt that Europe is really on the road to recovery.

Many Problems Yet to be Solved

Marketing is the greatest problem the farmer has to meet. Others have to do with freight rates, interest and taxes. But if the farmer can once get a price for his products that will net a reasonable return on his investment he will have the means to enjoy some of the pleasures of life without worrying continually about interest and payments on the mortgage.

Co-operative marketing is the only way group selling by farmers can be made possible. Co-operative marketing, then, should be our largest and most important work. Its progress is likely to be slow, for the reason that farmers do not yet fully realize the necessary elements of unity in selling.

On the whole we have made excellent progress. The Federation has done a great work and justified its existence. We cannot expect miracles when selfishness is everywhere so thoroughly entrenched. It will take time to educate and mould public opinion along right lines. It has been said that necessity is the mother of invention; likewise necessity is the compelling force that changes the course of industry. We are not seeking to overthrow the present marketing system and agencies, but we are trying to apply the principles of co-operation to that system, in the hope that it will eliminate some of the evils that have been absorbing the profits of our business.

The past four years has developed leaders in every county. Better still it has developed followers, not followers to trail blindly after their leaders, but followers who have thought out the situation for themselves, and who now follow because of enthusiasm born of knolwedge, showing that they are sold on the work and are willing to support the organization and make success possible.

REVIEWING THE LAST YEAR

BY SECRETARY CUNNINGHAM

The year 1922 opened with the farmers of the State facing a most distressing outlook. Farm products were selling below cost of production, and the condition of the average farmer was discouraging. During the early part of the year there developed a strong agitation against the high rate of taxation. This agitation being so unreasonable in its representation the membership soon began to doubt the sincerity of its sponsors, and investigation developed that it was a well directed effort toward demoralizing and destroying the Farm Bureau organization. Resolutions identical in purport, prepared in advance, were invariably presented, one of its objects being to reduce taxation by doing away with the County Agent.

This unreasonable and unjust attack soon spent its force, and as the prejudice it had engendered subsided the Federation undertook through a series of charts and compilations to lay the whole tax question and all State expenditures for public account before our membership. This information, apparently appreciated by the membership, soon had its effect upon the taxpayer who could see no hope for relief from burdensome taxation if it required such expensive methods of publicity where the amount involved but thirty-three cents on every $100 in taxes paid.

There is no reason for discouragement on the part of any one connected with the organization. The year has brought many encouraging changes, and none of them more welcome than the fact that farm products in Iowa, with few exceptions, are selling at a price equal to the cost of production, and in some instances leaving a margin of profit. Credit is somewhat easier, and, on the whole, conditions with the farmer at the beginning of 1923 are most hopeful.

There must be no letting down on the part of our membership in the future. We must carry on and in no half-hearted way. There is much to be done. While we have every reason to believe and feel that the crisis has passed, it should not be taken as an indication that an era of unbounded prosperity has been ushered in and that any one would be justified in indulging in extravagant practice. Let us all try and remember for all time to come the experiences of the past three years.

Board of Directors

The Board of Directors in the past have not had the opportunity to establish an efficient working relationship with their members. Only those who happen to be officers of the County Farm Bureaus have been able to acquire the contact so necessary to make for efficient service. We would recommend that the director be invited to attend county and township board meetings, and that his services as speaker at the county and township meeting be sought. Through such service the rank and file of our membership could be well informed at all times, and in return the director could be better informed on all subjects concerning the welfare of the county.

Executive Committee

The Executive Committee as in the previous years has given thorough consideration to the business of the organization. The number of meetings held by the board totalled one hundred thirty-two. Every responsibility devolving upon the board as the governing body of our organization has been fully accepted and faithfully carried out by each individual. We would recommend that the County Farm Bureaus establish a closer relationship with the Executive Committee. The two district meetings held annually have been very helpful and have been the means of giving the members of the board a better understanding of the real needs of future activities.

President

The President has carried for the greater part of the year just closed a far greater responsibility than ever before. The Secretary's time being occupied so largely in endeavoring to untangle the affiairs of the U. S. Grain Growers, Inc., it fell to the President to assume largely the responsibility of the Secretary. This duty was cheerfully performed, and, so far as it was humanly possible, every activity was fully supervised. This added burden necessarily interfered to some extent with the field duties of the President, but the spirit of co-operation and harmony that prevailed in the Federation office in which every employe assumed added responsibilities and duties without regards to days and hours of added labor made it possible to carry through the program of work for the year without added expense. The President attended many County Farm Bureau meetings, conferences and hearings in which the interest of the farmers was involved. In addition, there is a constant demand upon his time by the outside public. To maintain our public relationship with all interests requires a keen perception as to what constitutes courteous consideration as distinguished from selfish individual desires. The President has always been able to differentiate between such requests in a manner to prevent entangling alliances or serious embarrassments.

Secretary

We have as Secretary-Treasurer given the closest attention to the business of the Federation during the past year. The wise expenditure of our funds has been our first concern. The amount of dues paid by the individual member is not sufficient to carry on all of the activities that are demanded of us. We have never hesitated in assuming the responsibility of protecting the farmers' interests even though it required the expenditures from the reserve fund. We have never been able to reduce the amount of our expenditures to fifty cents per capita, which we are paid. During the year 1922 we were allowed a budget of $92,000 and our total expense, according to report hereto attached, shows an expenditure of $70,952.37, a saving on our estimated budget of $21,074.63 for the year.

I am of the opinion that we have probably reached the lowest possible amount that the work can be done for if we are to continue to carry on as strong as we have in the past. Every year there has been contingent expenditures to meet that could not be avoided, and if you will permit me to forecast as to your future needs, it would be that the expense of your organization will increase rather than decrease. You might well offer some criticism in particular cases for our refusal to allow larger expenditures to be made, but you must not overlook the fact that we are a state-wide organization and our policies must be to serve the State as a whole, and too often requests are made for the expenditures of our reserves for the benefit of local communities on problems that are purely local in character.

The question of collection of dues is one that must have most serious consideration. We have a very small number of cancellations of membership. In this respect we have no cause for complaint, but for three years there has been a slightly increasing number of protested checks each year. The bank should be asked to honor the check where there are funds to meet it. If this cannot be done, arrangements should be made to collect through other agencies.

Organization

Throughout the year the requests for speakers have been heavy. We have tried to meet every request so far as possible. For three years we have furnished many speakers for county, township and community meetings, and in addition numerous meetings are being held annually with commercial bodies and business interests throughout the State. The meetings have had the best of effect in developing leadership in our organization. It is rare indeed when a community does not have its own speakers for the monthly meetings, and the ladies are probably furnishing more outstanding leadership than the men. The list below will give the names of speakers and number of speaking dates during the past year:

Name	No. Meetings	No. Counties	Attendance
Hunt	75	52	50,000
Coupe	44	28	15,859
Hearst	34	17	14,300
Pedersen	249	36	65,965
Huntley	81	33	57,575
Soeth	105	38	53,674
Mrs. Richardson	112	38	93,400
Fisher	105	45	11,735
Nordhausen	60	29	7,680
Inman	38	13	9,260
Latta	23	4	480
Heline	30	13	5,865
Taylor	12	6	2,900
Lynam	33	13	940
Kitch	5	4	146
Hansman	8	5	825
Coverdale	4	3	160
Mackie	17	4	1,550
Total	1,035		392,314

We would recommend that an organization man or committee be provided by each county board whose duty it shall be to give close attention to organization work and the collection of its membership dues.

Women's Work

Early in the spring there was organized a state-wide women's committee consisting of the following named ladies representing their respective districts:

Congressional District	Name	Address
First	Mrs. F. Lee Davis	Montrose, Iowa
Second	Mrs. Don B. Seaman	Davenport, Iowa
Third	Mrs. W. M. George	Janesville, Iowa
Fourth	Mrs. W. E. Bouck	Mason City, Iowa
Fifth	Mrs. W. A. Tanner	Palo, Iowa
Sixth	Mrs. Clarence Decatur	Grinnell, Iowa
Seventh	Mrs. Jacob Solberg	Nevada, Iowa
Eighth	Mrs. Harley Condra	Seymour, Iowa
Ninth	Mrs. Gene Cutler	Logan, Iowa
Tenth	Mrs. W. Van Bloom	Dayton, Iowa
Eleventh	Mrs. John Wilkin	Correctionville, Iowa

No piece of Farm Bureau work has ever met with more general approval than the activities carried on by the ladies. The women's work should have more serious consideration and closer co-operation from the Farm Bureau boards, for their work is unquestionably the most stabilizing influence in the organization. No problem of the home can be solved without the aid of the women, and all problems of the farm concern them. The farmer with his farm problem and his wife with the home and family problem should form the basis of a true working relationship and be the incentive for the most harmonious co-operation within the ranks of a farm organization.

Legislation

The Legislative Committee has been checking over the Code Commission bills and working on legislative matters that will need attention by the present General Assembly. The committee being fully advised as to the necessity for decreased taxes recognizes that this can only be accomplished by a decreased expenditure and will endeavor to have all appropriations reduced to actual necessities.

Live Stock Department

The work on behalf of the live stock interests for the past year has been to emphasize the co-operative marketing as outlined in the National Live Stock Producers Association which adopted the plan of the Committee of Fifteen. This work was directed by Mr. Sar. His report shows that one hundred eighty different shipping associations asked for his service, and that every assistance possible was rendered such associations on any question pertaining to their live stock marketing problems.

At the last annual meeting of the I. F. B. F. a resolution was adopted directing the officers to use their influence and power in perfecting the co-operative marketing projects under consideration. As a consequence by co-operating with the National Producers Board of Directors and the Mid-West Federations there has been established the following terminal Live Stock Commission houses: St. Louis, Chicago, Peoria, Indianapolis, Buffalo and Fort Worth. At Cleveland and Sioux City boards of directors have been elected and commission houses will be opened in a short time. Every house establshed is functioning very efficiently and making money for its patrons.

Credit Corporation

The Farm Credit Corporation (I mention this because at your last annual session through a resolution adopted you directed the Federation to give it full co-operation) has a capitalization of over one million and is functioning as well as it can under handicaps of the most malicious and unwarranted opposition on the part of financial interests of the State. We can assure you that cost of organization, which was so widely heralded as wildcat promotion scheme, has not been excessive. The total, including office expense, and all commission, has been less than 10 per cent, and there is a creditable surplus on hand at this time. The real benefits that have come to our people in the main have been from the fact that the rates have been reduced in many instances to meet the rates of the Credit Corporation.

Transportation

The railroad situation has brought an unusual number of complaints on account of car shortage. Much relief has been secured at particularly congested points through the co-operation given by the Transporation Department of the A. F. B. F. The Iowa State Railway Commission and the A. F. B. F. called us into the rate cases involving the differentials on grain rates. At the hearing held in Des Moines, Dr. E. G. Nourse of Ames, and President C. W. Hunt appeared as material witnesses on behalf of the shippers in this case. As in former cases involving tariffs on grain, the cost of production records were extensively used to establish relationship and facts involving the high freight rates, as well as the necessity and justice of the differentials. Further reduction in excessive freight rates has been our constant effort.

Cost of Production

The Cost of Production Committee has carried on the work in its usual thorough manner. Dr. E. G. Nourse, head of the Agricultural Economics Department, has supervised the work while George Warrick and C. L. Holmes have directed the work and compiled the records. This work has probably established its value more quickly in the public mind than any other work ever attempted. When first presented before the Interstate Commerce Commission in the rate hearing a year ago, it was accepted with much hesitancy. Now the records seem to have become a necessity in all matters wherever the question of Farm Economics seems to have a part.

County Agricultural Agent

Our working relationship with the County Agricultural Agents and Home Demonstration Agents continues very satisfactory and pleasant.

The past year has been most trying to all engaged in these activities. Early in the year there appeared to exist amongst the membership a spirit of indifference, brought on no doubt by the continued low prices for farm products, which was causing the strongest hearted to falter. Added to this was the well directed campaign of false and malicious propaganda carried on by those who were unfriendly to the organization and sought to capitalize the discontent into active opposition to the County Agent. The last four months have brought a complete reversal of sentiment on the part of the public, which has come to recognize the absurdity of the arguments used against the organization. The Farm Bureau membership is now more firmly grounded and its value to the business of agriculture more firmly established than ever before. The County Agents as a whole have been efficient in their work, and a constructive influence in every community. The County Agent should be encouraged in every effort to carry on. The opposition has not ceased. It in fact has doubled its efforts, and we must meet the issue squarely.

TRANSPORTATION PROBLEMS

BY C. B. HUTCHINGS

We are thinking a great deal about transportation and agriculture today. You have had your attention called to the importance of agriculture itself, to the capital investment in it, which aggregates $78,000,000,000. After agriculture we can set up against that figure as the nation's second industry that of transportation.

You have all heard of the valuation fixed on the railroads by the Interstate Commerce Commission as being in excess of $18,000,000,000, and we are told that since that time improvements will bring the figure up close to $20,000,000,000. But the railroads are not our only means of transportation, and so we have to add to that figure the value of motor trucks, improvement of highways, waterways, water terminals, steam ships, etc., and when you have gotten all through with these various facilities of transportation you have run that figure up to $40,000,000,000. So these two, agriculture and transportation, are the nation's leading industries.

One hundred years ago the farmer who lived twenty-five miles from market did one thing and one thing only—he provided for his own living. He had no way to ship out the surplus. But today you men of Iowa find your markets 100, 500, 1,000, or perhaps 4,000 miles away, because you have available means of transportation that will take your produce to those markets. Industry and transportation are inevitably woven together, and agriculture as the nation's leading industry is deeply interested in it.

Have Two Ends in View

It has been our endeavor to co-operate with all who will co-operate with us in securing justice for the farmer. We have worked with the state railroad commissions to a marked degree. I am frank to say to you, not merely because I am in the State of Iowa but because it is a fact, that the Iowa Commission and the Iowa representatives have been working as cordially with us as any two people could work together. I want to bear tribute to the worth and value of their assistance, and we in turn have tried to be of assistance to them.

We have had in our work two particular ends in view. In the first place we want adequate service. We believe that the farmer is entitled to ship his products at the time the market is satisfactory to him. Possibly the car shortage which we all experienced this past fall has forced upon us orderly marketing before we expected to get it. Our car shortage has not been entirely an unmixed evil. But the proper way to get orderly marketing is not to have a pair of steel bands put around our wrists. We want to get it in an orderly way.

In the next place, with our idea of adequate service, any step which might lead to a reduction in what service we have at present would do more damage than good. Accordingly we have worked along the lines of preserving to you all the benefits of transportation which are the result of private initiative, and of keeping the service which we have at present and improving it if possible and making for more reasonable prices. Like any other good organization we have set up for ourselves certain very definite projects which we have tried to accomplish.

Iowa Figures Serve Good Purpose

You all know what happened generally with regard to rates. I want to go back to 1921 and show you how this thing has developed, slowly and gradually but decidedly for the benefit of the farmer. When we began our work we found pending before the Interstate Commerce Commission a complaint that the rates on livestock were such that the farmer could not continue to produce if those rates continued in effect. It seemed better for us to co-operate than to go off on some other kind of scheme in working out this problem.

We presented our case and got a decision that the rate on livestock over 100 pounds should be reduced 20 per cent, and that no rate so reduced should be less than 50 cents. It didn't look like much on the face of it, but it amounted in the aggregate to $7,000,000 a year. The important thing, however, was not the $7,000,000. While economic conditions were not the dominating factors they at least represented one factor that must be considered in the procuring of reasonable rates in the transportation of goods. The very day that principle was announced the Farm Bureau and the state commissions were in Washington trying the western grain and hay case. We fought that case to a finish and the decision saved the farmers of the West $38,000,000.

The testimony which the Iowa Farm Bureau presented through Mr. Cunningham and Professor Nourse was one of the most valuable bits of evidence that we had. Our success in that case showed us that with accurate figures and definite knowledge it is possible to secure results. When we go before the carriers, or before the commissions, with nothing but opinions it is a waste of time and we might just as well have stayed at home. The work that we have been doing in digging out these facts is essential, and I am glad that you are planning to continue this work.

Secure Further Rate Reductions

Right on the heels of this proposition President Howard went to the railroad officials and said: "Gentlemen, we appreciate your needs, the necessities of your investors, but we want you also to appreciate the needs of agriculture." He secured a reduction of 10 per cent in the rates on agricultural products and commodites in carloads which had not been covered by previous reductions. It meant to the farmers of America $55,000,000.

As a result of the insistence of the Farm Bureau and others the Interstate Commerce Commission presently started an investigation with regard to the level of rates on all commodities, and what should be a proper rate of return to the carriers. As Commissioner Lewis has pointed out to you today, the 5½ per cent provision of the law expired February 28, 1922. It was therefore the duty of the commission to fix what should be the rate of return. These things came up for investigation. The farmer had just received two or three reductions, and we confined our attention to the question of what should be the proper rate of return. We hadn't gone very far before the expression of the commissioners from the bench convinced us that we were absolutely right. When the decision was announced and made effective as of July 1, it was found to contain a reduction of 10 per cent on all of the products not previously mentioned.

Study Rates on Mixed Shipments

Aside from these general propositions there have been others in which we have been working. Iowa, like every other livestock state, is interested in the rate on mixed carloads of livestock. The present rule provides that rates shall be charged at the highest rate applicable to any stock in the car. Interstate shipments run 12,000 pounds on sheep, 17,000 on hogs, and 22,000 on cattle. Your rates run up the other way. The lowest rate is on cattle, perhaps 10 or 15 per cent higher on hogs, and about 20 or 25 per cent higher on sheep. Suppose you mix a car with all three. You then pay the highest rate, the sheep rate, and you are charged for the highest minimum weight, which is 22,000 pounds.

Now, it has been our position that it is a physical impossibility to get that much weight into a car, therefore there is no reason in the world why we should pay for something that is physically impossible to accomplish. It has been our position that the carriers, although they say so, do not actually maintain this rule as to other commodities where it is physically impossible to make such a loading.

The hearing was held before the commission in February, 1921. The complaint was drawn by the National Livestock Exchange, and at the hearing the carriers found a joker in it—it was possible by sticking a goat into the carload of cattle or hogs to beat the railroad. We want to play square with them. Accordingly at the argument we took the position that if the ruling which the complainant asked for was not a proper one we were willing that the commission should set one that would relieve us of this injustice. But, when we got a decision on July 1 of last year, we found that about the first thing in there was that the rule proposed permitted of fraudulent mixtures. Therefore, we cannot approve of it.

Case Still Further Postponed

We suggested a rule that each kind of stock should be carried at its own weight and rate. The commission said that would be a very good rule if we could find the weight at the country station, and we couldn't adopt that. So they told us to apply practically the highest charge which would accrue on any kind of stock in the car if that car were moved in straight carloads. We thought that would run about two, or three, or four million dollars a year to the shippers of the country, and the order was to become effective August 19. Somehow the carriers didn't like it, and they came with a petition to have it reargued or reheard. The commission said, "We will consider that and give you an answer October 19. Meanwhile we will postpone the effective date." About the fifth of October they said they would have the case reargued. We kept working along hoping to get results, and finally they said they would set it for January 19, and now it is postponed to February 1.

Discriminatory Rates in the South

I want to tell you something about the livestock down in the southeast. Here in Iowa you have had a mileage scale for thirty-four years, but the railroads didn't do business that way down there. They made the rates low at competitive points and high elsewhere. Where a railroad competed with them a low rate was in effect, and all points between got a high rate. Those rates were established in 1891 and had not been changed except for the general increases since that time. In 1915-16 the Interstate Commerce Commission began to press the carriers to get rates on some kind of reasonable basis, and they have been working on that since.

About the first of last year the carriers filed some tariffs proposing rates on livestock which purported to comply with the decisions of the commission. We made an examination of these proposed tariffs and found that they represented increases running from 45 to 95 per cent. County Farm Bureaus, State Farm Bureaus, state commissions, livestock exchanges, individual shippers, the American Farm Bureaus, all went to Washington with their protests. We got those tariffs postponed; had a hearing on it at Louisville on September 12. We got a provision of a two-for-one rule which we had never had in the South. We got a provision on minimum weights that was low, 16,000 on hogs, and in addition we got a set of rates which iron out the inequalities, and we defeated the increases they were after.

One thing more on that: It was the unanimous testimony of all the people who worked together in that case, and we had representatives of the packers, of the livestock exchanges, the state commissions, and of the various state organizations, it was the unanimous testimony of all those people that it was the work of the Farm Bureau that put the thing over.

Problems of Freight Car Distribution

The thing that stands out largest in the minds of the people this year is the matter of car service. I don't need to tell you that we had a car shortage. People asked where the cars were. Every state seemed to be obsessed with the idea that some one else had its cars. The complaints came from the Dakotas, from Illinois, from Iowa, Ohio and from Nebraska. You people loaded your cars and they went east. The people of Illinois load their cars and they go east. The people of Nebraska load cars and they go east. Sometimes as much as 70 per cent of the business is east-bound, and nothing to bring it back. On October 1 the figures showed that box cars on some of the lines in the eastern sections were 80 per cent in excess of cars owned, while in this section they were 13 per cent less than the cars owned. Somebody down there had the cars, and one of the things we did was to press the American Railway Association and the Interstate Commerce Commission to get those cars back home where they belong.

The peak of car ownership came in April, 1920, with approximately 2,300,000 cars. We have today 76,000 less cars in the country than there were at that time. Actually less cars with more business to handle. Further, if you put it on the basis of serviceable cars, the latest figures indicate that we are about 212,000 cars short of what we were two and one-half years ago.

In January, 1922, we were loading about 650,000 to 700,000 cars a week. For about ten weeks last fall we were loading in excess of 950,000 cars a week. Another thing: The average weight per car fell off a ton in a year. Now, a ton doesn't look very large but when you multiply it by a million cars a week, you will see that we are using a lot more cars than we ought to.

Will Push Marketing Projects This Year

Marketing is our big problem for next year. Marketing is the farmer's critical problem. This whole thing of transportation can be solved in one of two ways. Farm prices and transportation costs are out of joint. If we can get farm prices up, or transportation costs down, put them in better relationship, then we have got the answer. The transportation department is working on one end in getting transportation costs down, while our marketing activities are getting the farmer's prices up. We don't propose to take any chances by only working one end. Further, our transportation work is trying to dovetail into the marketing work at every possible angle.

It is only fair that we should do this. If we try to get cars for a co-operative livestock shippers' association, isn't it only fair that the shipping association should patronize the Producers' Company at the terminal market? We have written a letter to co-operators in which we say: "We have gotten you these cars—do you intend to ship to the Producers?" We are waiting to see what the results will be. Play fair, that's the thought.

ECONOMIC AND POLITICAL CO-OPERATION

BY SENATOR BROOKHART

I think if there was any incident in my life that distinctly started me on the road to the United States Senate it occurred in this room three years ago at the State Farm Bureau convention. I came down here to oppose an endorsement of the railroad law. It wasn't long after that meeting until those who were interested in the subject began urging me to become a candidate for the United States Senate. I never up to that time had met a labor leader, except one, one from my home town, Warren S. Stone, the grand chief of the engineers. But I defended labor against the attempt, as it seemed to me, to drive them toward involuntary servitude in making their right to strike a criminal offense. After that meeting I found that I had made friends of labor everywhere.

I still think, my friends, that the greatest question of this generation involves the common people—those who produce by the work of their hands as well as their brain, upon the farm and in the factory, and that the great question is that they should unite in economic and political co-operation.

Why a Farmer-Labor Combination

I went down to Washington City a year ago in July as a special representative of the Farmers' Union. I went for the purpose of making the opening statement to the joint committee of Congress that was investigating agriculture for the farmers of the United States. In that statement I said to the committee that I believed producing labor on the farm and in the factory and everywhere should co-operate together for their economic and political rights. I said that labor was the principal customer of the products of the farm, and I said that the farmer was the biggest customer of the products of labor. Then I set out that of the dollar which the laboring man paid for the products of the farm, the farmer gets 38 cents.

It was challenged. A New York millionaire on that committee thought that kind of talk was worse than bolshevism. I said it was the best estimate that I could get, and I said it was the duty of the committee to investigate an important fact like that and give us something authoritative, something that can be quoted and used with confidence. They spent five or six months investigating that and other questions. At the end of the investigation the committee reported that I was wrong. Yes, that joint committee of Congress reported that out of the dollar which the laboring man pays for products of the farm the farmer gets 37 cents.

Cost of Distribution Is Excessive

When you turn that proposition around, and the farmer becomes the customer of labor, buying in the United States more than 50 per cent of the industrial products, you will find the same result. The farmer must have equipment for his farm, and in addition must have equipment for his personal use, his home and his family, and that makes him a large buyer of all of it, and out of the dollar which the farmer pays for the products of labor the laboring man gets a little less than 35 cents.

There are some other governments in the world that have figured out this question. There isn't any doubt that this cost of distribution is excessive in the United States. Every farmer knows it. Every laboring man knows it. They have not stopped with finding just the facts. They have gone ahead with the remedy, and what is the remedy? It is economic co-operation, the producers and the consumers co-operating on the Rochdale plan.

Who invented that theory? It wasn't the farmers at all, it was labor that started that theory. They invented it. Twenty-eight poor flannel weavers of Rochdale in 1843 began saving their pennies and in a year they had saved a pound apiece, and then they started a consumers' co-operative store. That store started so modestly has grown until today it has a membership of 4,000,000 families. It has 1,500 of these societies in Great Britain. It has the greatest wholesale establishment in the world and it has the greatest wholesale store in the world in Scotland.

They carried the idea to Denmark. What happened over there? The farmers, after organizing their co-operative societies, decided they would organize the government, too, and they elected a majority of that parliament in both houses. They established the best government-controlled land credit system in the world. When those chaps began about eighty-five families owned 95 per cent of the land, and today 89.9 per cent of the farmers own and operate their farms, because they established a credit system which furnished them money to buy those farms.

Somebody or Something Should Be Amended

I have been sizing up those chaps who want to keep producing labor of one kind fighting producing labor of another kind. As I have got it figured out about 40 per cent of our people—maybe a little more than that—may be rated as farmers; about 35 per cent rated as hand-workers, and about 15 per cent as brain-workers who earn their living by brain work just as honestly as any hand-worker, and then there is about 10 per cent of middlemen and capitalists and profiteers.

According to estimates the farmers of the country have an investment of about eighty billion dollars, but it has shrunk down a good deal since the Federal Reserve turned us over; but even at that it is less than a per capita proportion of the wealth of the country. These 35 per cent of laborers have still less proportion of the capital, or the 50 per cent including the brain-workers with them. We do find, however, that the 10 per cent has more than half of the national wealth, and considerably more than half of the national net income.

Now it occurs to me that while we have got things arranged on that basis these chaps with such large net incomes should pay some of the taxes. We passed an amendment to the constitution of the United States providing for the taxing of incomes. Then they passed an opinion of the supreme court that you couldn't tax a stock dividend. I guess we will have to amend the constitution of the United States again or else amend the supreme court, I don't know which. I tried to amend the court a little the other day, but got licked on it.

Swatting the Standard Oil Company

Now I am going to call your attention to some of the things that have happened along this line in the United States recently. I sent over to the Federal Trade Commission for an official statement on this question, and I am in receipt of the tabulated list of stock dividends declared in the year 1922 by 328 companies, and they amount to $2,149,151,425. If you go down through the whole list of 328 companies you can put the manager of any one of these outfits on the witness stand and prove beyond a reasonable doubt that the interests of the farmer and the laboring man are antagonistic and they ought to fight. Just wait until we find out fully and get fully organized so we will know whose interests are at stake, and we will show these fellows where to head in.

There is probably only one way to get these chaps now, and that is by taxing back into the treasury of the United States these sums which they have taken from you by economic power. I am in favor of trying to do that. We will do it by statute, if we can, and then if the court holds the statute unconstitutional, as a lot of these courts do, we will amend the constitution—do you see? The best provision in the constitution of the United States, the best provision in any constitution, is the one that provides for its amendment. Remember that. Why, the fathers amended our constitution ten times themselves in the first Congress after its adoption, and those are the amendments that really give us the bill of rights under the constitution.

It is time for us to look these matters up a little. It is time for us to figure out our own proposition a little. As I told you, we have just been investigating some of these big companies in the oil business. I remember a good many years ago I helped to stir up a little lawsuit on the question of rates down at Kansas City. We held the first hearing there on the discrimination of the Standard Oil Company against the independents, and it stirred up a great breeze, and the investigations then went all over the United States and they finally resulted in the Attorney General bringing an action and the court dissolving the Standard Oil Company into its component parts.

Well, I had three of those companies in before the manufacturers' committee since I have been down there to find out what the effect of my good work had been, and, do you know, the Standard Oil Company of New Jersey with its $125,000 a year president—a man who could be duplicated many times right here in this crowd, able but not more able than hundreds of others everywhere—ever since we succeeded in dissolving that outfit and stopping that monopoly, has earned more than 56 per cent a year on their whole tremendous capitalization. I don't know whether I did any good or not, in dissolving that outfit.

Would Turn the Rascals Out

We are not going to do any good as long as the Congress of the United States is influenced so much by those big interests. We are not going to do any good until we get a majority of fellows in both houses of Congress who are willing to look at this from the standpoint of the common man and to provide the legal methods that will stop this taxation without representation.

I am going over to New York in a few days to talk to that crowd over there. I don't know whether I will get out alive or not. I will tackle it once, anyhow. And then after it is over I am going back again, and the next time I go back I am going to see the farmers and the laboring people. I want to see your Farm Bureau and your Grange, Mr. Bradfute, and I want to see the State Federation of Labor, and I want to see the American Legion and the Spanish War Veterans, and I want to see all of those crowds. There is enough in common in all those organizations that they ought to be working together. They ought to turn these fellows out of Congress that see everything through Standard Oil and railroad spectacles.

PUBLIC INTEREST AND RAILROAD VALUATION

BY DWIGHT N. LEWIS

Member Iowa Railway Commission

There has been much said about the Esch-Cummins law. Several things in the law need amendment, and it is my opinion that, sooner or later, Congress will enact those amendments. There has been much hue and cry that the powers of State commissions have been taken from them. It did look that way for a long time, and our friends of the Interstate Commerce Commission seemed to be obsessed with that very thought. The passage of the law upon which they based their assumption should be cleared up, and I have already seen an amendment proposed by Senator Cummins that will clear it up. But today there is little or no conflict of authority between the Interstate Commerce Commission and the various State commissions, and we are functioning exactly as we did before the war.

We have materially reduced the Iowa Intrastate coal rates, as well as the rates on sand, gravel, crushed stone and other road and commercial building materials, and we have on our docket for hearing the rates within Iowa on grain and its products, and brick and tile. The railroad companies have promptly put our reduced rates into effect. We are still making orders relative to train service, station conditions, elevator sites, distribution of cars, etc., etc. In fact we are functioning 100 per cent.

Not Easy to Fix Valuations

You have heard of the so-called guaranty clause of the Esch-Cummins Law. The rate of return provided in Section 15-A was not a guaranty, but a direction to the Interstate Commerce Commission to fix such rates as would until March 1, 1922, in their judgment, make a return of 5½ per cent of the value of the railroad property used in transportation. Not upon capital stock, dry or watered, nor upon bonds, nor debentures, nor anything else, save and excepting the value, not of all of the railroad property, but of that property belonging to the railroad company used in transportation service.

In endeavoring to arrive at the valuation the Interstate Commerce Commission was besought by the railroad companies to make such valuation about twenty billion dollars. Some shipping interests thought sixteen billion would be about right. The Interstate Commerce Commission practically ignored representations made by interested parties, and fell back upon their own valuation work, so I have been informed, and made such deductions therefrom as they believed warranted them in fixing a tentative valuation of eighteen billion nine hundred million dollars.

Nobody has claimed that these figures are accurate, least of all the Interstate Commerce Commission, but the best they could do under the circumstances. When the valuation work has been completed, and, after hearing finally adopted, then we shall have figures that will enable regulatory and tax-assessing bodies to work intelligently. In the meantime the work of valuation is progressing satisfactorily, although it does seem slow to those who are anxious to get results.

Endless Amount of Work Involved

The task of evaluating the railroads is an enormous one. Holes must be made in ballast to determine the condition of it; ties and rails must be inspected; bridges carefully analyzed; station houses and other buildings valued after careful auditing. Nothing may escape the closest scrutiny, and that is what the agents of the Interstate Commerce Commission have been doing for many years, until at last the field work has been practically completed, at a cost to date of about $24,000,000. The railroad companies in making their figures have spent approximately $65,000,000, and many states, including Iowa, have spent varying sums in checking up the work.

In Iowa the work has been devoted exclusively to checking of land values, and it has produced some very interesting situations. If any of you are interested, our valuation department will be glad to give you more detailed information. In my opinion our work has already saved Iowa hundreds of thousands of dollars on railroad valuations, and I am hoping the Fortieth Assembly now in session will appreciate the importance of this work and provide as liberally as possible for its continuance.

The valuation of rail properties when completed will not only enable the railroad commissions and the Interstate Commerce Commission to intelligently fix just, fair, and reasonable rates but be of the utmost importance to our State Executive Council in fixing the assessments of railroad properties in the state. It will do away with litigation that has plagued our state with costs of thousands of dollars.

Rock Island Asks Big Increase

The federal statute requires the Interstate Commerce Commission to fix final valuation by states, and a resolution recently passed by the United States Senate provides among other things that "The Commission report the amount of the value of each of the railroads in each state, respectively, so far as the same has been compiled."

Just now the Rock Island Railway valuation is before the Interstate Commerce Commission. In this case the railway company is demanding an increase of more than eighty-two million dollars in the Interstate Commissions reported reproduction cost new, and of practically ninety-nine million dollars in present values of lands, other increases bringing the total increased valuation asked to $208,463,716. The valuation of this property is of particular value to Iowa, so our state commission has been in the thick of the fight. While there have already been other valuation cases of importance, this is the first involving a great railroad system. It has been selected by the valuation committee of the national association and the group of state railroad commissions which are acting with it in valuation matters, as offering the best immediate opportunity for getting real results.

The states are being represented at this very important hearing by E. W. Reed, special valuation counsel of the Valuation Committee of the National Association of Railway and Utility Commissioners; by John E. Benton, General Solicitor of the National Association; J. H. Ralls, valuation attorney of our commission, and J. E. Eubank, valuation expert of the Iowa Commission. Their work has been especially commended.

Interests of Public Not Neglected

I am here to assert that the interests of the public are being presented to the Interstate Commission effectively and efficiently in the pending Rock Island hearing, the only one in which Iowa has any direct interest that has yet come before the commission for final hearing.

I am proud of the record the Iowa Commission has made in these valuation matters under the leadership of Commissioner Woodruff, and want to assure you that no one is asleep at the switch in reference to valuation of Iowa railroads.

A NEW LEASE ON LIFE

BY MRS. GENE CUTLER

We are engaged in a great business. Two years ago I would have said occupation, but in that time the Farm Bureau has taught us that we have a Business—the biggest business in the United States. Usually when we speak of Big Business we get a picture, perhaps, of tall buildings, inside of which are well-dressed men and women, held aloof from the rest of the world by iron gratings, and occasionally we hear the clink of gold and silver.

Or perhaps we get a picture of massive structures of stone or brick alongside mammoth smokestacks, from which pour great clouds of soot and blackness to soil the world. These are the factories, and we say they are Big Business. Or we see shining rails and locomotives, and they symbolize our transportation system, and we call it Big Business.

What we should see is a broad stretch of hills and valleys covered with Iowa's tall corn, Oregon's wheat, the cotton and tobacco of Texas and Virginia, and the corn and oats of the East. Here and there are cottages and bungalows, with a few houses of commodious type, all housing farmers and their families, each a small part of that Biggest Business in the United States—Agriculture.

Represents Heavy Investment

The value of all farms and farm property is twice that invested in all the manufacturing industries. It is four times the Interstate Commerce Commission valuation of all the railroads, and twelve times that of the capital, surplus and undivided profits of all the banks in the United States. We have always been Big Business, but we have just learned to see ourselves collectively and appreciate that. We are the basic industry and produce 80 per cent of the wealth every year. City-built industries can never become greater than agriculture because they are only monuments of margins. These city-built industries become top-heavy and burdensome. That is the thing we are suffering from now, and it is up to us, folks, to change these conditions, to make agriculture really profitable so that it can take its place at the head of Big Business where it belongs.

For years we have gone on trying to make a living under handicaps that might just as well have been removed, only there was no one to do it for us. We have as a nation built up our manufacturing industries, subsidized our railroads, fostered most everything except agriculture. We took the course of least resistance to keep peace.

Have Three Important Lines of Work

Conditions have changed. Our free lands of the West are gone. We have robbed our soil unmercifully, and now we face the task of making a living where we are, right on this soil that we have been robbing year after year. Not only that but our children must live on it. We didn't like the deflation. We haven't believed that it was an unavoidable result of the war, but the fact remains that we took it. We have met the emergency. We have liquidated until it hurts, and we say never again will we trust our business entirely to the other fellow.

Legislation, finance and marketing are our three big lines of work. We are not so foolish as to believe that we can legislate wealth, but we do believe that legislation can distribute wealth, and in order that we may have a square deal—we don't ask for anything else—we have our representatives working for us in legislative halls, both here and in Washington. They have already done a lot of things for us, and are in a position to do more. For one thing never before have we had the data to work with that our representatives have now. Then, too, we now have men working for us who really understand farm conditions, who know our problems and can speak for us with intelligence.

Better Methods Coming Into Favor

We want a different credit system. I am no banker. Maybe I don't know much about credit, but I do know that we can't raise cattle on thirty-day paper. In Iowa we do real farming. We need a longer credit system, and I don't believe we are going to stop until we get it. If we have to build it ourselves, why, we will just remember that we are the biggest business in the United States, and gathering new confidence and strength from the thought we will keep at it until we have it built. It may take time; it may take courage to stand by the thing when it looks hard; we may suffer while we are waiting for it, but back of the system we will stand until we have a financial system that fits our need.

Traditions are being shattered. Old farming methods are being thrown upon the scrap heap and better methods substituted. Use of the pencil and record book are helping to bring these changes. We don't like to bother with figures after we have already done a big day's work, but we must come to it. In every locality there are at least a half dozen men who will tell you that they are raising the best type of corn in that locality. A test plot with records names the winner, and immediately all of the half dozen, and others, begin raising the best kind of corn.

Farm Bureau Develops Community Spirit

Among other things we have learned in the last few years is that what is good for us is good for our neighbors. We have come to think of our community as that larger home of ours, and real community spirit is being developed. We are beginning to see ourselves as a collective unit, just as a city does, and we are willing to bind ourselves together for mutual advantage, as the city or town does.

If we are to develop this community spirit we must have a social center, and right here the township Farm Bureau fills a long-felt want. In some localities we have had older farm organizations to pave the way for community activities, but it happened that we did not have any in our locality until the Farm Bureau was organized on a community basis a few years ago, and as I look back at it all it seems rather remarkable that we are already taking for granted the community meetings that we talked about and looked forward to for so many years.

This Farm Bureau meeting which we have once a month or more is broadening our lives and reshaping agriculture in Iowa. I believe we must give the social gatherings of the Farm Bureau a great deal of credit for coming through the past few discouraging years with high courage. We are learning the fundamentals of co-operation at these meetings. We are learning that co-operation is putting ourselves in a condition so that others can work with us. This is the foundation of our organization. No other organization is built from the bottom this way, built on mutual understanding, a mutual desire to sacrifice for and be helpful to each other.

Work of Farm Bureau Women Recognized

Farm problems will be solved by government and by legislation, but back of that, and acting as a guiding spirit and steadying hand, must be the farm folks themselves, thinking and working and playing harmoniously together, until agriculture is in its rightful relation socially as well as economically with other industries. Closely linked up with and reflecting and intensifying the wholesome atmosphere of that new kind of community that is being developed, is coming the better homes for which the men and women of Iowa are striving, and which we must have if we are to compete effectively with the city.

In the Farm Bureau all the work of the men and women is done side by side. It is a partnership arrangement all the way through, where they are working on an equal footing. This is made possible, inasmuch as no discrimination has been made in the selection of officers, in county, state or national organizations. More than that, home and community work has been made a regular department of its program. Last year the women of Iowa did a splendid piece of work, and you men have been generous in your recognition of it. We feel that in your recognition and appreciation we have fallen into congenial step that speaks well for the future of the Farm Bureau.

Beauty a Tonic to the Soul

There is one value common to all project work that we get in addition to the direct benefit derived. In every well-organized project a number of women are organizing and teaching other groups, so that all the time leadership is being developed, and this leadership is being used to advantage all through the Farm Bureau movement. Many townships seemed dead until some woman or group of women got behind the activities.

And in our project work we are not forgetting to add beauty to the farm home. A rose in every dooryard has become the slogan in the home-beautifying contest just beginning to receive real attention in Iowa. We have known all along, but are sometimes too busy to remember, that beauty is a tonic to the soul. Pretty things to wear, attractive homes, flowers, pictures, and the thousand other little things which we see and work with every day are the most important factors leading to happiness and contentment. After all that is the reason why we want a larger income, the reason why we learn to save time by becoming more efficient home makers, that we may have more time to devote to our families.

Let us strike the "only a farmer" attitude on the head and bury it. Farming is the biggest business in the United States, and we have no problems that we cannot solve if we go at them intelligently and in a co-operative way. Let us throw away our old attitude toward the extension service and our agricultural college. For years we educated doctors and lawyers at public expense before we began to educate farmers.

Our attitude toward the necessity for organizing is changing. We have come to accept the fact that we must be organized if we expect to meet success. We cannot exist in an unorganized state, and we need to throw away the last remnant of suspicion toward our neighbor, and, joining hands with him continue in the triumphant march toward the better and grander things of organized agriculture.

CREDIT, FINANCE AND CO-OPERATIVE MARKETING

BY O. E. BRADFUTE

President American Farm Bureau Federation

As farmers we can just as well face facts as we find them, and our job as Farm Bureau members is to try as best we can to find the true causes underlying such conditions, and plan methods to help solve the difficulties. The underlying causes seem to be in large measure attributable to the following conditions:

Over-production of farm products with no adequate or profitable demand to consume the surplus which must now go for export.

No method of limiting or controlling the surplus.

No method of orderly marketing and ditribution through the year.

Lack of established grades and regular market for these grades.

Transportation inadequate for the needs of agriculture and at a ruinous cost.

A financial and credit system without sufficient flexibility to meet the needs of agriculture.

Discrimination in Interest Rates

No method should ever be adopted which will make it easy for the farmer to go in debt, or to advance him money without proper and sufficient security for the loan. But it is unreasonable that the farmer should pay from 8 to 15 per cent for his advances while the distributors of his products and other industries whose products he buys get their loans for from 4½ to 6 per cent. The farmer must have the same chances to draw from the great reservoirs of money as are open to others, and with sufficient time limits to meet the needs of his business.

Taking 1913 as a 100 base index number we find that in August, 1922, the index number of freight rates on non-agricultural products is 151 while prices on non-agricultural products is 206. Freight rates on agricultural products is 155, with prices on agricultural products is 117. Moreover, the purchasing power of freight rates on non-agricultural products expressed in terms of prices on same products is 73, while purchasing power of freight rates on agricultural products in terms of prices on such products is 133. Thus expressed, non-agricultural products have almost doubled the advantage of agricultural products in rates.

Let us go further in expressing some of these things in terms of corn. In 1913 the freight revenue per ton would buy 1.4 bushels of corn but in 1921 would buy 3.1 bushels. The yearly earnings of a railroad employe would buy 1,492 bushels of your corn in 1913, but will now buy over 4,000 bushels of your corn.

Need More Harmony Between Co-operatives

Co-operative marketing of farm products is no longer an experiment, but is now an established fact and approved by business men and financiers of the highest type. The experience of those farmers engaged therein is such as to commend co-operative marketing most highly as a satisfactory and profitable method of marketing farm products. The number of such marketing organizations is increasing every week, and there are now more or less active some sixteen or eighteen thousand co-operative marketing organizations engaged in handling farm products throughout the United States, and the most reliable figures obtainable show that they are doing a business of well over a billion dollars annually.

There are now over two hundred co-operatives which cover an entire district, or state, or even more than one state in their operations. The result, however, with such a great number of small associations is that they themselves become competitors with each other. They should be co-ordinated and correlated in such a way as to lead to real co-operation, and also in order to reduce the great and unnecessary overhead expense of each. While the requirements of different farm products and different sections of the country may make it necessary to work under somewhat different rules, there are certain underlying principles which are common to all and might well be handled by some acceptable organization which is prepared to render such service as may be in common demand by all.

Marketing to Be Leading Project

It will interest you to know that in compliance with the resolutions adopted at the last annual meeting of the American Farm Bureau Federation there has been established a co-operative marketing department in our Federation, and on Monday of this week Mr. Walton Peteet was engaged as director of this department and will begin his work February 1. We believe him to be the best qualified and most competent man available for this job to be had in America, and I bespeak for him the most hearty and generous support on behalf of the farmers of Iowa.

The departments of Administration, Relations or Organization, Information, Transportation, Research, and Legislation, of the American Federation are each pledged to lend valiant assistance to the Co-operative Marketing Department, and all the forces of the present administration will be centered around the great project of co-operative marketing.

Permit me to say to the farmers of Iowa that great and useful machines are being set up by your County, State and National Farm Bureau, but they will do you little good as individual farmers if you do not use them. The Farm Bureau is built on the cafeteria plan, so you must help yourselves. Let us therefore as farmers work together for the good of each, and thereby for the good of our state and nation in order that we may have better schools, better churches and better homes in which may dwell a happy, contented and prosperous people.

CHICAGO PRODUCERS' COMMISSION ASSOCIATION

BY A. SYKES

Something like eighteen months ago there was appointed what was known as the Livestock Committee of Fifteen. Out of the work of that committee has come the National Livestock Producers' Association. The first selling agency, or commission company, established by the Producers' Association was at St. Louis on the first day of January, 1922. Then followed the house at Indianapolis, and next the Chicago house, of which I happen to be president. All of these selling agencies or commission companies are organized strictly on a co-operative basis.

Now, there is one thing I want you to understand, and that is that we are talking about the co-operative marketing of livestock. Another thing I want you to understand clearly, is that co-operative marketing of livestock doesn't simply mean the formation of a co-operative shipping association, and then continuing to ship your stock to the old-line livestock concerns, because the formation of your co-operative shipping association is only the starting point of co-operative marketing of livestock.

Plan Will Succeed With Proper Support

A lot of people have the idea that the only thing there is to the co-operative marketing of livestock is the formation of a co-operative shipping association back in the country. It is not my thought to abuse anybody, but I want to call your attention to the fact that you will never market your stock co-operatively and successfully until you learn to carry it clear through.

The Committee of Fifteen gave this question serious consideration. It undertook to work out a plan, not only for Iowa but for the entire country. The plan is not perfect. At the time it was offered it was the best we could do. But we believe it is big enough and broad enough to take us all in, and we believe that if it is followed and supported by the men back in the country that it will prove sufficient and in time will bring about the very things the Committee of Fifteen realized are necessary to make the co-operative marketing of livestock a success.

The National Livestock Producers' Association acts in an advisory capacity over the various terminal market associations. Each terminal association is a member of the National Livestock Producers' Association, and contributes 50 cents a car to its support. At the present time the Association has established selling agencies at St. Louis, Chicago, Indianapolis, Peoria, Buffalo and Fort Worth, and is considering similar agencies at Sioux City, Cleveland and Buffalo.

Business Shows Consistent Growth

Now about our Chicago house and our experience in the Chicago yards. I talk to you about Chicago because that is our market, Iowa furnishing about 40 per cent of the receipts at the Chicago yards. We opened there for business June 19, 1922. The first ten days, June 19 to June 30, we received 177 cars of stock. In July we received 549 cars. In August we had 561 cars. In September, which as you all know is a light month, we had 439 cars. October 541 cars. In November we received 800 cars. In December 963 cars. These figures, you will note, show a healthy increase right from the time we opened for business. In November we had 172 straight loads and 628 loads of co-operative stuff. That is, one-fifth of our business at the present time runs to straight loads, the balance being made up of shipments that contain two or more owners—sometimes as high as thirty. The total number of owners represented in the November receipts was 5,289.

During December we received 194 straight cars and 729 co-operative loads. The percentage of straight cars in December was about the same as in November, a total of 936 cars, representing 6,012 owners, with an average of 7.8 persons to the car. The value of business done the first six months—up to December 19—was $5,200,000. During December we ranked from second to fourth place in total number of cars received, and have stood first on hogs for the last three months. During the past week we received 246 cars and stood in first place on both hogs and the total number of cars received. This gives you some idea of the volume of business handled at Chicago by the Producers the last six months.

Firm Has Wide Outlet for Stock

Now, we have had some problems to solve. Some of you men know that years ago we attempted to operate a co-operative livestock commission company at Chicago. For various reasons we found it impracticable and had to close. In other words we were forced out and had to quit. We have not encountered as stringent opposition as the old co-operative concern had to face, but we did encounter severe competition at first, and no doubt that was responsible for some of the criticism that we received from shippers over this state.

But we are getting along nicely now. We sell to everybody that is responsible that the others sell to. We have the same competition in our buying alleys that the old-line companies have, and there is no restriction so far as our company is concerned. This is due largely to the Packer and Stockyards Act enacted by Congress, which, under the supervision of the Secretary of Agriculture, has done away with many of the practices followed in the old days of the original co-operative commission company that we undertook to operate in Chicago. This law has furnished the protection we lacked then.

No Discrimination Against Company

The first four weeks in Chicago we operated almost exclusively with the packer buyers because the other fellows were afraid to trade with us. But that is all done away with. Everybody trades with us, without regard to whether we have a membership in the Livestock Exchange. The market is open to us, and we trade with the eastern order buyer, the shipper and all. We are getting along just the same as the other firms. Our salesmen sell to shippers and eastern order buyers just like the old-line firms are doing. For a number of weeks our sales of hogs to outside buyers ranged as high as 45 per cent.

Now, this organization has been placed in Chicago for the benefit of the producers of the country. It is your organization. It doesn't belong to any board of directors, to the manager nor to anybody else. It belongs to the producers of the country. It is there to assist you in the co-operative marketing of your livestock. And I want to impress upon your minds here today the importance of patronizing your own organization. That is the big thing. If you don't help support it your influence goes to help to destroy it. After the Farm Bureau Federations have gone as far as they have in establishing these co-operative marketing agencies you certainly cannot refuse to patronize them.

Salesmen Are the Best Obtainable

Next comes the question of equipment. Our salesmen are among the very best to be found in the yards—they don't take a back seat in any of the departments. Our head cattle salesman bought for Swift and Company about fifteen years. He was also with Clay Robinson several years, resigning his position to go into business on his own account, and was operating for himself when we took him over. Our butcher cattle salesman is a man of the same type, although younger. He has not been in the yards so long, but has handled cattle for ten or twelve years, and has been connected with some of the best firms at the yards.

Our hog salesmen are the same class of men. Our head hog man has more than twenty years' experience in the yards. He knows hogs. On January 10 we took on our third hog salesman, took him from Morris and Company. He had been one of their hog buyers for eight or ten years. Our hog business increased to such an extent that we had to add a third alley and a third salesman to handle it. That is the class of men who handle your livestock when it goes to the Chicago Livestock Producers' Association. Men of high caliber, men who know livestock, men who can sell your stock for all that it is worth.

Refund Not the Important Thing

I suppose you want to know what benefit you are going to get out of this thing. You men who have been patronizing it know that you will get a part of your commission back. From the very first our house at Chicago has operated at a profit. Some months a bigger profit than others, of course. At the close of the year's business we are going to prorate back whatever the board sees fit to set aside for that purpose. I presume it will retain and build up something in the form of a reserve. You wouldn't want to do business with a bank that had no reserve back of it. It is the same with a co-operative commission company. You want a company with a reserve back of it to protect it in time of trouble.

But whatever may be refunded to you on commission charges will be insignificant compared to what we hope to work out in the marketing of livestock in the future, and what the Committee of Fifteen hoped to accomplish. The thought that has been in the minds of the men who have made this question a study for years, that there should be some way by which we could establish the orderly marketing of livestock, and to prevent the violent price fluctuations that characterize the business.

Success Depends on the Producers

Now, the last word I want to leave with you people is this: that you patronize your co-operative marketing agencies. You will never get anywhere unless you do. The Farm Bureau hadn't any other thought in mind than to establish these agencies for the benefit of the producers of the country. They have gone to the expense, giving time and effort and thought, in order that the producers might be benefited. And the only way this can be done is through the support and patronage of the producers themselves.

EDUCATION AND AGRICULTURE

BY DR. R. A. PEARSON

It seems to me that two great lessons have come out of the experience of these past two years. The public has learned a lesson and the farmers have learned a lesson, and both lessons should last a long time.

The public, especially the people in the cities, have learned more than they ever knew before about the bigness and importance of agriculture. They have always admitted that it is a great industry but many of these admissions were of the character of good natured flattery for the people engaged in the kind of work that used to be done by the fathers and grandfathers of the city folks.

Many residents of cities have looked upon agriculture as a sort of spontaneous source of food. They always did get their food, and plenty of it, and they saw no reason why that happy condition should not continue. They just naturally expected it would continue.

Our city friends have learned something about the fundamental character of agriculture. Some comments that are like real wheat have appeared in the news and editorial columns of our great newspapers and in magazine articles and in official actions of our law-making bodies. To bring about this appreciation it seemed to be necessary for some large interests in great business centers to suffer a bit, because of the agricultural depression, and this has happened.

Need More Knowledge of Agriculture

With their new knowledge the people have willingly enacted legislation which was fair and just to the farmers and which should have been enacted long ago and would have been if the importance had been understood then as now.

We want the men, women, and children of our cities to know how big agriculture is. They generally think of the wheat crop. Many of them today would tell you it is the most important agricultural product in the United States. We want them to know that the corn crop is three to four times as big, and that the dairy products made in one year in the United States are worth enough to buy three national wheat crops, and that it would require all of the gold produced by all the mines in the United States during the last forty-five years to buy the milk and products of milk that are made in the United States in one year.

We want the public to know that according to the latest census figures the value of agricultural products of the United States was over twenty-one billion dollars. This is more than the total value of all the automobiles made in the same year, plus all the men's and women's clothing, plus all the cotton goods, plus all the foundry products, plus all the iron and steel manufactured products, plus all the flour mill products, and plus all the slaughtering and meat packing products. When one begins to talk about agriculture in the United States or in Iowa he has to use big figures.

Agriculture Needs Special Credit System

One result of public appreciation of the agricultural industry is the enactment of better agricultural credit legislation than we have ever seen. In the past the law makers representing the public have appreciated that storekeepers and manufacturers needed credit. A system very nicely adjusted to their requirements was worked out and fixed by the law of the land. Their period of turnover is short and they want loans for sixty to ninety days, and they have been accommodated. Farmers could get loans under provisions of the same laws but the farmer's period of turnover varies from six months to about three years. A three months loan for a breeder of live stock is not much help. We had to wait a long, long time for this to get into the consciousness of the public to the extent that legislation resulted.

I hope it will not take much more time for the farmers to get the consideration they deserve in connection with tariff legislation. Tariff laws are enacted and repealed apparently without regard to the time element required for agricultural adjustments. A merchant or a manufacturer can adjust himself to a new tariff law which will become effective one or two or three months hence, but the farmer is helpless. He can neither make nor destroy a flock of sheep in that short period of time. He should have special consideration.

Farmers Must Plan Own Remedies

The great lesson learned by the farmers of our country from the experiences of the past two years is that they must give more attention to looking after their own interests. The Farm Bureau has made a splendid record. Farmers now know they must take the lead in planning and putting remedies into effect. Organization is the first essential. It seems that every interest, large or small, is more or less organized.

The farmers' organizations should correspond with the importance of their industry. These organizations should not exhaust any of their strength by working against each other. They should agree on great principles and work together for them.

Problems requiring the best thought and the concentrated energy of the farmers of the country include taxes, railroad rates, high costs of commodities, credits, tariff, high costs of marketing and low prices of farm products. The chief problem and the one which embraces most of the others is the narrow margin between cost of production and selling price. In too many cases there is no margin or it is negative.

Education Pays Large Dividends

While legislation and co-operation are vital to agricultural success, I believe that the largest benefit may come from individual effort. It is this that explains the difference in the success between two men. One grocer succeeds, another fails, though they start with equal capital and equal opportunity. One farmer goes ahead while another stands still or loses ground, though they had the same advantages in starting. It is so in every activity in life. The greatest need of the less successful person is the use of better methods. This means more knowledge or more ambition or both. The remedy is largely through education.

Education pays large dividends to the individual and the state. A farmer plants clover and it will not grow. He knows that clover collects nitrogen from the air and he needs nitrogen and it is expensive when purchased in sacks. But his clover would not grow. Again he tries and again he loses his seed. Finally a neighbor comes to his rescue and tells him to use lime. What is this knowledge worth? He has lost two seedings and two years of time and the benefits which should come to other crops for two years.

Two farmers discuss the cost of raising pigs. They cannot agree and they decide to keep careful records of all expenses. At the end of the season they compare notes and find that the average cost on one farm was seven cents per pound and on the other ten cents, and the market was nine cents. They compare notes. The first one tells the other how he feeds and cares for his stock. The second farmer uses this knowledge the next year and gets his cost of production two cents below the sale price. How much is that knowledge worth to the second man?

Carelessness and Poor Methods Mean Loss

The cash value of knowledge to the farmers of any state is simply above estimation. There are thousands of exhibits among the better farmers of Iowa to prove this statement to the satisfaction of anyone. But some people think that knowledge which increases production is detrimental because the increase of production tends to reduce prices. There is enough truth in this to give it currency but not enough to entitle it to credence. If the farmers of Iowa can, by the use of better methods, increase their corn crop 10 per cent without increase of costs of production, then they have decreased the cost of producing one bushel of corn about 10 per cent. Does anyone think that a 10 per cent increase of the corn crop of Iowa would materially affect the price of corn in the United States? Would forty-five million additional bushels of corn in Iowa materially affect the price of a crop aggregating three billion bushels?

The main thought is this, that in other states and in other countries extensive efforts are being made to devise and extend better methods of production, thus tending to reduce costs. If by chance unusually good weather prevails, which is the chief factor leading to over-production, and crops are increased to the extent that prices are severely reduced, then who suffers most and who suffers last? That farmer or that community or that state or nation that did not use the best and most economical methods of production will be the chief sufferer, and some of them will quit the business. That farmer or community or state or nation that did produce at least cost will suffer the least. The fear of extending education because it will increase production and reduce prices is a scarecrow. Be not deceived. The farmer who produces at least cost because of his superior knowledge and ability is the farmer who is in best condition, whether prices are high or low. Knowledge is one commodity of which we are not afraid of having too much in Iowa. If we are to maintain good prices of our lands and make good profits, our methods in agriculture must be superior to others.

Autos Cost More Than Schools

Besides paying dividends in cash, education has other large values. If it is the right kind of education it helps us to know ourselves better and to better understand our neighbors, and it helps us to be better citizens. The splendid school system that is being built in this state is evidence of what Iowa people think of education. We have invested in school buildings in Iowa less than half as much as the value of our automobiles. The schools are getting better but even yet there are thousands of farm communities where the same little one room schoolhouse is serving that has served for a dozen years.

Consolidated schools afford an opportunity for great improvement. They may make it possible for the country child to secure as good a common school education as the city child. But care should be taken not to establish these schools until they are justified and then to see that their influence is not detrimental to farm life. The best assurance for the right kind of influence in a rural school is a right attitude toward agriculture on the part of the teachers. This comes from experience on the farm, and it means sympathy for farm people, a liking for country life, appreciation of the importance of agriculture and realization of the possibilities of developing in the country the principles of right living and sound citizenship. In every consolidated school such leadership should be felt.

Some persons even yet, with all the development of agricultural science and its wide applications, think that agricultural education is an inferior sort of training and that it is not as worthy or as dignified as education in medicine, liberal arts, engineering, or law. The person who is educated in agriculture must have a wide variety of knowledge, especially concerning the laws of Nature,—the laws that are made by the allwise Creator. He must know the laws that govern the growth and control of harmful and helpful bacteria, and a hundred other such things.

Educational Privileges for Farmers

Can anyone truthfully say that it is less dignified or less worthy to be an interpreter of laws which God made than it is to interpret the laws that man made? I think it is as dignified to understand the laws that govern deadly conflicts between bacteria in the soil as to understand the laws relating to upkeep of fences or trespass on the top of the soil. When the difficulties and the intricacies of agriculture are considered in connection with other industries, no one can truthfully say that the people engaged in agriculture are any less in need of education than are those in other kinds of work. It is fortunate that in agriculture one is able to get much knowledge through his own observation and efforts.

Perhaps someone has wondered why I have talked so long without mentioning Iowa State College. It is because I have had something larger in mind. The college is only an instrument to help promote the best things that I have been discussing. It does so through research and education. Carefully trained experts are hunting for new and better ways of doing things. Much of their time is given to devising methods to combat new and unexpected difficulties which appear too often at the farmer's back door or in his field.

The educational work is conducted through a great student body, including a considerable group of young men and women from every county of the state. The educational work is conducted, also, through the extension service which reaches all parts of the state and many thousands of people.

Extension Work Reaches Far Fields

About 4,000 young folks are in the college at Ames and more than half of them are studying agriculture to become farmers or home economics to become teachers and home makers; the others are taking engineering, industrial science and veterinary medicine. It costs the state about one dollar to every three and one-half dollars that is costs the students or their parents, for this education.

Does it not interest you to know that since the war, 1250 men who have been disabled in service have been trained by Iowa State College. Without this training some of these men would become public charges. Some of them now are better trained to make a living than they were before the war. Accurate records show that their training in the college, which averaged fifteen months duration, increased their earning capacity $364.00 per year which means over $450,000.00 increase of annual income for the entire number.

The average farmer of Iowa this year is paying the equivalent of less than three cents per acre on his land as his entire share of maintaining Iowa State College, including all branches of work and some building operations. All farmers together thus pay about one million dollars.

The extension service is in close contact with the farm bureaus throughout the state. What has been accomplished through the co-operation of these two agencies is known to you. The reduction of costs of production, women's work, and boys' and girls' clubs with over 17,000 enrolled members, need not be discussed here. That this work is appreciated can be shown in no better way than by the fact that it is so generously supported by leading farmers who give their time to its promotion without salary and who contribute also toward the general costs of maintenance.

College Working for Good of All

We have been talking about what the state of Iowa is and this is an inspiring subject. Still more inspiring is the thought of what this state might be. Iowa State College, as a faithful instrument of the people, desires to co-operate in every way possible toward making Iowa still better and still greater. The chief pleasure in living comes with growth. You have ideas concerning the growth of your interests. The people of the state want the state to grow in things that are good. It is a privilege to help bring this to pass.

STATUS OF U. S. GRAIN GROWERS, INC.

BY E. H. CUNNINGHAM

You are all familiar with the report of the Committee of Seventeen, the subsequent adoption of that report, and the organization of a corporation with a governing body of twenty-one directors. It was organized in the Spring of 1921. It started to provide a sales agency through which farmers could co-operatively market grain.

In May, 1922, a call went out for help. At the call of Mr. Hunt the Mid-West Farm Bureaus went into conference to consider to what extent the American Farm Bureau Federation and the Mid-West Farm Bureaus were obligated to see that the institution could be made to function. They decided that there was a moral obligation to do all they possibly could to save it.

A creditors' committee was appointed, of which I happened to be a member, along with Mr. Hill of South Dakota and Mr. Coverdale. This committee undertook to get in contact with the creditors and get powers of attorney, or something, in order to keep them off the back of the institution until we could find out what the trouble was.

Federations Asked to Take Charge

That was in May. We went through the affairs of the institution from top to bottom, and we found out what had happened. We didn't find anything dishonest in the handling of affairs, but we did find it to be the most grossly mismanaged proposition that had ever sprung up, not excepting some of the highpressure propositions that have gone to pieces.

We found it in deplorable shape financially. The money had been spent. It owed about $394,000. It showed $285,000 deficit over and above assets. The problem was what ought to be done in the future. We granted the old board all the power, authority and time needed to straighten the thing up. Finally they came to us and said: "We have come to the end of the road, and the only suggestion we have to offer is to take it over and reorganize it and see if you can save it." If you are inclined to criticize some one for stepping in, remember that the Federation had never stepped in or attempted to take charge of any part of the institution until the board of directors and the executive committee themselves came and asked us in a written statement to come over and save the proposition.

We found that the plan contemplated selling grain through some sort of co-operative agency. No attempt was made to build that agency, at least not in the beginning. The first thing was to go out and sign up the farmers by contract, more than 60,000 of them, and I will say frankly that it was wrong in principle to tie up 60,000 farmers scattered all over the country to contract for the sale of grain through a sales agency that didn't exist.

Organization Proceeded on Wrong Basis

Now, any time you neglect to apply sound business principles you get into the red, and, soon or later, you have to back up. That is what happened, and my judgment is that we have got to back up completely and go out and set up these sales agencies—that is, provide a place for marketing this grain, and when we have them established to go to the co-operative elevator. By co-operative elevator I don't mean one under that name that is in the grain business as a speculator, but an elevator where the individual owners and customers are real co-operators. We have some problem there, but I believe the only sound policy is to back up and establish sales agencies.

Following that idea we went to all the boards of trade and asked for seats on the exchange. The only place we got through was at Minneapolis. There are 3,300 contracts in Minnesota and about 6,200 in North Dakota, and they should all function through that exchange at Minneapolis. These contracts are with individuals, in some instances tied up to the elevators, but in a great many instances floating around Dakota.

A certain percentage of the people move every year. In Minnesota and Dakota the proportion is larger than in Iowa. The result is that in Washington, Montana, Oregon, Idaho, and in every little town in the Dakotas men can be found who are signers of these contracts, which were to be the foundation of the business and are now floating all over kingdom come. That is why I say the individual is not the man to tie this proposition to. This is a grain institution and it cannot be used for any other purpose. We must tie it to the co-operative elevator, because if 20, or 30, or 40 per cent of the membership around that elevator moves next spring it will be the business of the elevator to go out and get in contact with the new men that come into the community—obviously a thing the men at the Chicago office cannot do.

Denied Seat on Grain Exchange

Now, if we could go out and get fifty or seventy-five elevators in Illinois that are friendly, it would give us something to start with. The boards, generally speaking, are friendly but there is need of educational work with the managers. If we had fifty co-operative elevators in Minnesota, and from fifty to one hundred here in Iowa we would have a nucleus around which to build a sales agency. We would be starting on the ground.

We couldn't get seats on the exchange. We didn't go to the board and try to do anything out of the ordinary. We didn't undertake to get onto the board of trade and then violate the rules. We made a straight-out application. That application was approved by the president of the board—and it was endorsed by vice president of the First National Bank of Chicago. We had some standing with those gentlemen who sponsored this application for a seat on the exchange. I didn't try to get a seat myself personally. I told the committee when they advised me to drop the application, or to withdraw it and put in a personal application and they would suspend the rules and get me a seat on the exchange, that I was acting for the farmers' organization and I expected to make good.

Policy Not One of Destruction

So, they turned us down. The status is fixed. That was the real object in making them pass on it—to fix the status, to find out if they ever seriously contemplated letting us in there. Now the status is fixed and they say we cannot come in. I have accepted the challenge to fight it out on behalf of the farmers of this country. You stand behind this proposition and we will win. And we will win without destroying anything. We will not destroy the board of trade, we will not destroy a thing that is of any advantage in the marketing of grain.

Confidence in the proposition has been shaken. There were two factions on the board, and it became a question who would control the U. S. Grain Growers. They went out to the farmers for votes without regard to what happened. And it has all come about because we had an unsound policy of proceeding in the Farm Bureau Federation. We encouraged the Committee of Seventeen and it worked out the plan. We carried them along with all the expense money they needed, and allowed them to function 100 per cent. They had the services of the best lawyers in the country, but when that child was born we left it to the tender mercies of anybody that wanted to jump on it. It also fell victim of the personal ambitions of several men on the board, and with all these difficulties the child couldn't live.

To have permitted that policy to be followed was wrong for the American Farm Bureau Federation. If we are going to encourage these organizations in the marketing of our products we have got to stand behind them and see that they function efficiently, so that nobody can disturb them. We have done it in the live stock business against the advice and prejudice of almost every shipper in the country, and we made it go because we drove it along roughshod over every obstacle that was put in its way. We believed it to be businesslike and sound, and we stayed by it, and gentlemen, it has won.

The board of supervisors of the board of trade will not let you function down there. They are fighting for their lives. How soon you can get a decision from the supreme court I do not know. We are going to attempt to build a sales agency, and we are going to have some more activity next week if we have your approval.

RESOLUTIONS

We, the members of the Iowa Farm Bureau Federation, in convention assembled at Des Moines, Iowa, January 12th, 1923, pledge our support to the principle of co-operation and to improve in every way possible the agricultural interests of the great commonwealth of Iowa, economically, educationally and social through the united efforts of the County Farm Bureau.

That we urge upon our members the necessity of real organization and call their attention to the work that has been done by other organizations through loyalty and earnest support given their organizations which have been grappling with their problems.

That we believe programs of publicity based upon accomplishments of the Farm Bureau Federation—of which there is a proud list—will prove far more effective in gaining and holding the support of farmers than the exploitation of plans and untried theories.

That if farm organizations and cooperative enterprises are to escape public disapproval the strictest economy and business judgment must be exercised in the preparation of budgets and the subsequent expenditure of funds.

That we recommend the State and National Farm Bureau Federations exercise careful supervision of any cooperative marketing projects which they may promote, to the end that they be protected against extravagant and incompetent management.

We oppose appropriations through Congress or otherwise for the inauguration of new projects which require the state to co-operate on a fifty-fifty basis.

That we condemn the exploitation of National natural resources for private gain, and urge a more active national policy of conservation to prevent waste and to curb mercenary motives.

That we look with suspicion on all projects that need to be subsidized, and are unalterably opposed to the ship subsidy bill now before Congress.

We recommend a budget law that will compel an estimate to be made in advance of all expenditures of public funds, and then prevent all boards or commissions from exceeding such estimate except in extreme emergency cases upon order of court, or duly instituted authority, and an amendment to the law so that county funding bonds cannot be issued without a vote of the people.

We ask that such changes be made in the present road law as will require all expenses of every kind for the relocation, building, maintenance and surfacing of the primary roads shall be paid out of the primary road fund.

We favor the right of any unit which voted for a paving proposition on a proper petition and after providing fully for all existing obligations, to hold a second election which may reverse such decision.

That we urge the producers by their patronage to show their confidence in the producer owned and controlled marketing organizations which were established at the various market centers upon the insistent demand of the shippers.

We urge Congress to revise the National warehousing act, and our Legislature to so amend the State warehousing act that the farmer may take advantage of local elevator storage, and to make under proper conditions storage on the farm and issue of warehouse receipts possible.

We heartily indorse the principles voiced by President Harding declaring the sacred right of men to quit their work, individually or collectively. It is the duty of the government to protect every man who desires to work from interference or molestation.

That we appreciate the service of the Iowa Farm Credit Corporation and indorse its efforts to give financial aid on long and intermediate time loans.

That we urge Congress to establish an effective quarantine to hold in check the European corn borer.

We recommend the adoption of an Intermediate Agricultural Credit bill, and urge its early passage by Congress.

We are opposed to the manufacture and sale of filled milk.

We demand of Congress the early passage of the truth in fabric bill.

We are in favor of amending the present auto license law to make it more equitable by allowing a reduction of ten per cent annually for five years.

We strongly recommend the license fee on commercial trucks and auto busses be greatly increased, and that rate of increase be multiplied in proportion to weight of load and speed.

We demand an amendment to the income tax law for the taxing of stock dividends on the same basis as other dividends.

That we heartily indorse the work of the boys and girls clubs, and we urge every County Farm Bureau to provide a place in their program for work for this activity.

We recommend legislation providing that State funds shall be deposited in the county where paid, and drawn upon by the State Treasurer for monthly disbursements on a pro rata basis. Surplus public funds should, so far as practical, be available to all communities.

We are in full accord with the movement under way to prevent the shifting of the tax burden from the railroads of the State onto the owners of farm land.

The measure of ability to pay taxes for the support of the National and State Government is NET INCOME, and the bulk of the taxes should be levied and collected on that basis. The tax should be progressive; that is, the greater the income the higher the rate.

We demand that there be no increase in appropriations or tax levies.

We are opposed to a sales tax.

We recommend that the laws be so amended that the appraised value of all cattle tested for tuberculosis be at their assessed valuation.

Whereas, our present transportation system has been found inadequate for present day needs, we urge upon Congress the enactment of such legislation as will bring about the immediate construction of the proposed Great Lakes-St. Lawrence and Mississippi Deep Water-way projects.

Whereas, it is impracticable for the Interstate Commerce Commission to attempt to supervise the distribution of cars as between individual shippers throughout the United States; and

Whereas, there should be some governmental authority within reasonable reach to which appeal can be made to require equitable distribution of cars without regard to whether the same are to be used for shipments interstate or intrastate:

Therefore, be it resolved, That we respectfully urge upon Congress the amendment of the Interstate Commerce Act in such way that the regulatory authorities of the States may make reasonable orders and regulations not in conflict with federal law, or with lawful orders of the Interstate Commerce Commission, requiring cars within the respective borders of such states to be equitably distributed to shippers desiring the same, without regard to whether they are desired for use in shipments that are interstate or intrastate.

We urge upon Congress the repeal of Section 15a of the Interstate Commerce Act as amended by the Esch-Cummins Act and the making of such other amendments thereto as shall clearly limit and define the power as exists between the Interstate Commerce Commission and State Commission that there may be no misunderstanding that the State Commissions definitely have the same authority over rates as existed before the enactment of the Transportation Act.

We are opposed to the granting of indeterminate franchises to public utilities.

We indorse the action of the Agricultural Bloc in Congress in their efforts to help agriculture.

That we have the utmost confidence in the ability and willingness of the Iowa Congressional Delegation to use every possible means of investigating Muscle Shoals in order that they may intelligently consider the future policy of the project from the standpoint of giving the greatest protection to the Government investment therein, and the fullest protection to the public interests for the future, and pledge our support to their efforts.

We recommend an amendment to the Smith-Lever Act granting more privileges to County Agents and Home Demonstration Agents in their co-operative work with farm organizations.

We indorse the principle of co-operative marketing.

Co-Operative Marketing

We wish to indorse the resolutions on co-operative marketing adopted by the American Farm Bureau Federation at its annual convention in Chicago, December 11-14, 1922.

RESOLVED:

(1) That we urge further progress toward proper marketing of farm products as co-ordinate with economic production in equalizing the present handicap of the American farmers;

(2) That the American Farm Bureau Federation shall continue to give outstanding attention to the marketing problem and continue the policy of strengthening and encouraging co-operative commodity marketing organizations;

(3) That the American Farm Bureau Federation maintain a division of co-operative marketing, to be managed and directed by capable and experienced co-operative marketing specialists;

(4, That this division shall in every possible way stimulate and promote the co-operative marketing movement in the United States and shall plan and carry out an extensive national educational campaign for co-operative marketing of farm products;

(5) That the American Farm Bureau Federation, acting through this division, shall formulate the fundamental principles of true commodity

co-operation as exemplified in the history and experience of successful farmers' co-operatives and give the same wide circulation;

(6) That this division shall tender its services as counselor and advisor to state and district organizations and agencies on questions relating to type and plans of organization, campaign methods, problems of operation and other related subjects;

(7) That this division shall endeavor to unify or co-ordinate all organizations, agencies and interests in behalf of a comprehensive and united program of co-operative marketing in the United States;

(8) That the Farm Bureau Federations, National, State and County, should be active in educating producers of farm and live stock products to the advantages offered by the co-operative marketing agencies that have been and shall be established, stressing the fact that the success of these agencies depends primarily upon the loyalty and patronage of the producers themselves.

Co-Operative Egg and Poultry Marketing

WHEREAS, many local Farm Bureau communities in many states have developed co-operative marketing units for eggs and poultry, and

WHEREAS, these local units have had to work independently and to their disadvantage in marketing their products,

THEREFORE, we recommend that the American Farm Bureau Federation, as soon as practicable, call a conference of State Farm Bureau workers and others interested in the poultry industry to develop plans for centralized marketing of eggs and poultry.

The Iowa Farm Bureau Federation expresses to President Hunt and Secretary Cunningham the fullest appreciation and sincere thanks for their loyalty, faithfulness and sacrifice. More especially do we recommend the many accomplishments of the year, and for the sound aggressive and forward looking policies which they have put into operation, and which they are developing, and which will mean so much to the accomplishments of greater benefit to farmers and to agriculture in the future.

Likewise we commend and thank the Executive Committee, the subordinate officers and the special workers who have served as loyally, faithfully and efficiently for the good of the farmer and his cause.

IOWA FARM BUREAU FEDERATION OFFICIALS AND COMMITTEES

President, C. W. Hunt, 410 Observatory Bldg	Des Moines
Vice President, Chas. E. Hearst	Cedar Falls
Secretary, E. H. Cunningham, 410 Observatory Bldg	Des Moines

Executive Committee

First District, Z. S. Ratliff	Mt. Pleasant
Second District, C. F. Coverdale	Delmar
Third District, A. L. Middleton	Eagle Grove
Fourth District, L. S. Fisher	Edgewood
Fifth District, Burt H. Neal	Mt. Vernon
Sixth District, I. N. Taylor	Oskaloosa
Seventh District, J. A. Hansman	Gilbert

Eighth District, J. H. Lyman	Corning
Ninth District, W. W. Latta	Logan
Tenth District, J. H. Nordhausen	Manson
Eleventh District, Oscar Heline	Marcus

Women's Work

Mrs. Ellsworth Richardson, Director	Pella
First District, Mrs. E. L. Russell	Danville
Second District, Mrs. H. Woodward	Williamsburg
Third District, Mrs. Heike A. Rust	Sheffield
Fourth District, Mrs. George Pecham	Castalia
Fifth District, Mrs. Roy Joslin	Anamosa
Sixth District, Mrs. Clarence Decatur	Grinnell
Seventh District, Mrs. Jacob Solberg	Nevada
Eighth District, Mrs. Harley Condra	Seymour
Ninth District, Mrs. Gene Cutler	Logan
Tenth District, Mrs. Ives	Irvington
Eleventh District, Mrs. John Wilkin	Correctionville

PART VI

State Food and Dairy Commissioner's Report for Year 1922

R. G. CLARK, Commissioner

We whose lots have been cast in Iowa have much to be thankful for. The oft-repeated expression that we live in the best state in the Union has more to it than mere local pride. If all the states were scored (a term used in this department in grading) I doubt if there is one that would equal ours. Iowa is indeed a wonderful state. It is first in so much and a close second so often I am afraid that we are becoming more or less indifferent to our own resources and opportunities. You hardly take up a paper that you do not run across an article giving interesting information about our state, like the following:

"MORE REASONS FOR CONFIDENCE IN IOWA"

"The average value per farm including all farm property in Iowa is $39,941.10. The same average for the entire United States is $12,084.00. Iowa's nearest competitor is Illinois and our total farm values exceed theirs by $1,703,778,724," and so on with a series of comparisons that seem almost too good to be true.

Farming is the big business of this state and it is a business that is susceptible to all the intelligence and experience that one may put into it. I want to say here that at no time in its history have the teachings of our agricultural colleges, experimental stations, and associations which have their representatives in every community extolling the virtues of the pure bred, been listened to and acted upon as at present.

The deflation through which this country has gone during the last year and a half hit the farmer first, and on him was the most severe, with the result that all now agree more attention must be paid to diversified farming. That means a better utilization of feed grains and crop by-products, by feeding out a great number of beef cattle, by winter dairying and egg production, by planting better gardens and more small fruits. This insures to the home a wholesome variety of foods and thereby lessening the household expenses. The margin between income and outgo must be widened if the present values of our farms are to be sustained. The land owner as well as the renter has a right to expect more than a mere living. They got that when they did not have one-sixth as much invested in a farm as now. It is our fundamental business; and if anyone is entitled to a living wage it is they who do the work on our farms, and if anyone is entitled to a fair interest on their investments it is the owners of these farms.

Diversified farming with a good dairy herd, be it large or small, as the center of operations will come nearer producing the desired result one year with another than almost any other plan. Farming is not a job any longer; it is becoming a science, and must be so treated if the farmer expects to get the returns we have already said he is entitled to. If one-half of what is claimed for the pure bred is true and if one-half of what is charged against the scrub can be believed, there must be a tremendous waste on our farms at present, for it is claimed that not over 15 per cent of the stock is pure bred and some set it as low as 10 per cent. Again when you consider what a small per cent of the butter that is made brings the top price, and that the remainder sells from two to ten cents per pound less, you are once more reminded that this department has plenty of work ahead. It is more or less thus in all branches of agriculture.

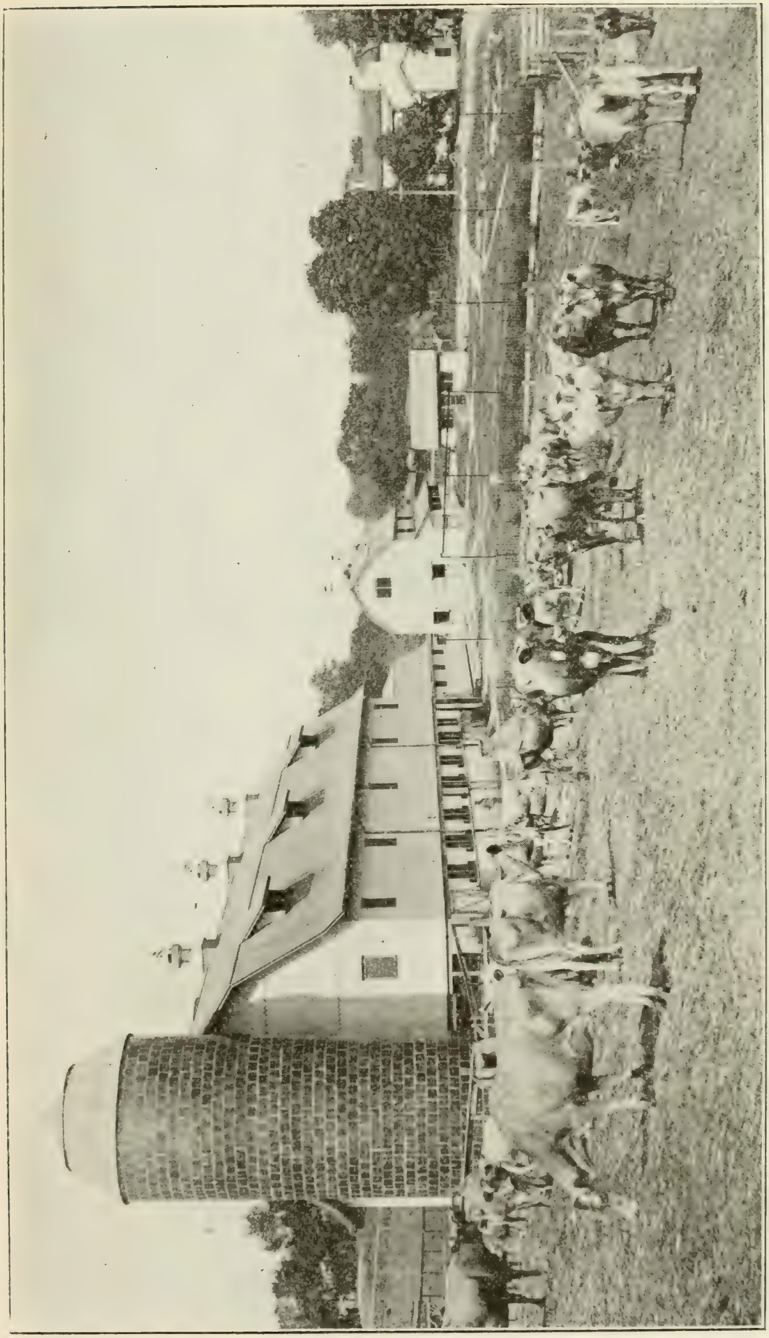
I do not say this as a reflection on what is being done, but simply to show that notwithstanding all the improvements that have been made we are a long way from getting out of the average farm all that it can be made to produce. Conditions are so much better than a year ago that much of the gloom that was so depressing then has largely disappeared. We are looking forward to one of the most successful years that this department has enjoyed.

The reviewing of the work for the last year and my recommendations for the coming year will be taken up under the separate heads of the different subjects as they appear in the following pages.

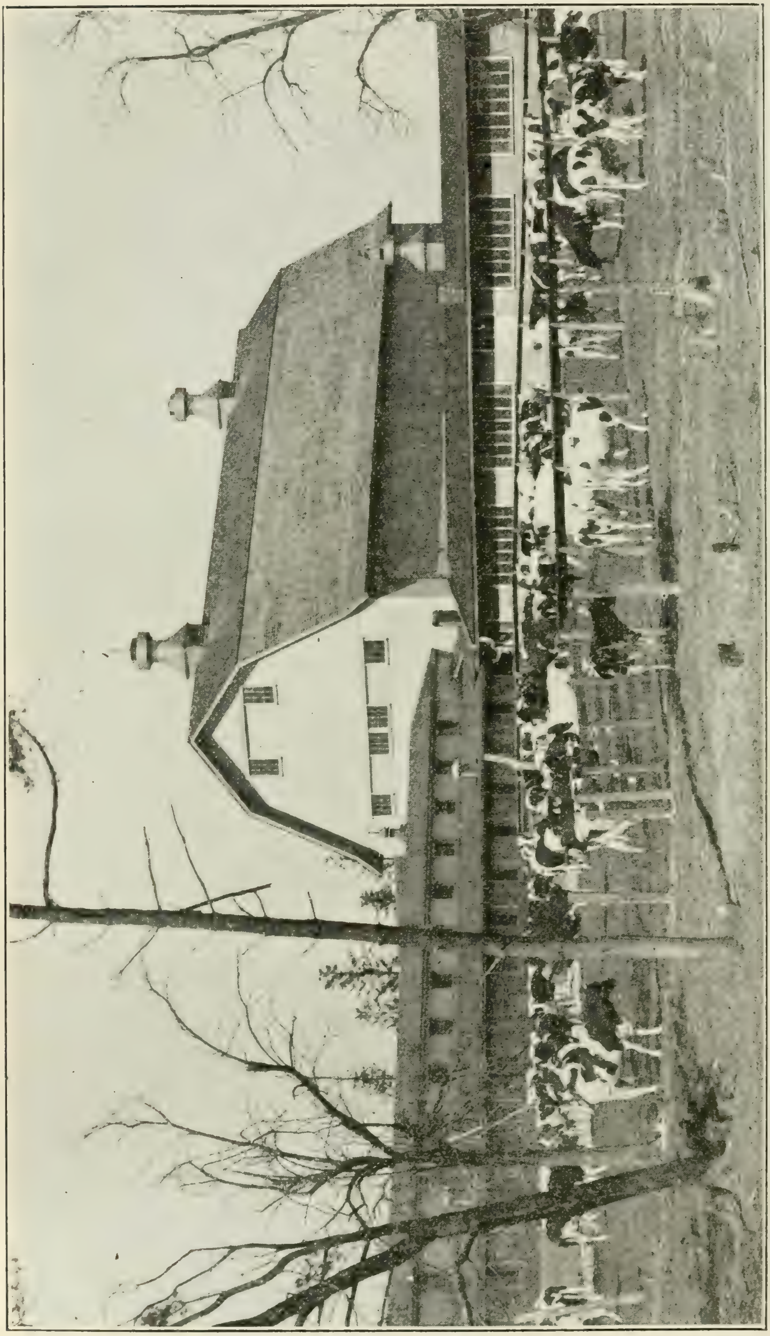
DAIRY PRODUCTION

Dairying has become a powerful economic factor in Iowa. Never in the history of the state has there been as much interest displayed in this branch of agriculture as during the past year.

Farmers, bankers, and business men also—all consumers of dairy products, have taken an active interest in the industry and are awakening to the possibilities of dairying and what it now means to the state in general.



DAIRY PRODUCTION BRINGS PROSPERITY



MORTGAGE LIFTERS AND NATION BUILDERS

Estimates of the income received by the state from dairy products during the past year place the figures at $126,948,011.88, derived from the following sources:

Creamery Butter	$48,462,805.12
Ice Cream	5,460,775.75
Market Milk	24,664,968.34
Cheese	52,821.19
Cottage Cheese	250,000.00
Farm Dairy Butter	11,648,000.00
Condensed Milk	408,641.48
Skim Milk and Buttermilk	16,000,000.00
Fertilizer	20,000,000.00

With the exception of creamery butter, you will find that the foregoing figures show another decided decrease in values as compared with the figures given in the reports of the commissioner during the years 1920 and 1921. I account for this by the continued decline of prices on all our markets during the past year, as well as by a decrease in the amount of some of the products manufactured. In spite of this decline in prices dairy products have been considerably higher on our markets when compared with the market values of all other farm products.

Conditions are now the reverse of what they were in 1918, at which time there was a scarcity of help on the farm. The farmer's sons and his hired men were going into the service, in many instances obliging him to dispose of his cows so that he could give such time as he had to the care of his crops. All farm products were higher in price than dairy products, which created a tendency to sell rather than to feed these crops.

The farmer today can obtain plenty of good farm labor at a reasonable price and the price of dairy products is such that he is doing his utmost to market all the grain and forage crops he can through the cow and the butterfat route.

Iowa has this year manufactured 25,427,419 pounds more creamery butter than was ever produced in this state before, making this another banner year. Production has steadily advanced during the last two years until we are now at what might be termed the "peak."

It is not necessary for this department to spend much time trying to induce farmers to engage in dairying because market, financial, and other conditions have been such that every farmer knows the possibilities of the dairy cow. However, I do think considerable time and effort should be spent by all dairy organizations and by the dairy men themselves in trying to bring down the cost of production.

If production continues to increase as it has during the past two years, market conditions may eventually be such that only those who have paid attention to economy in production will survive.

There never was a more opportune time for dairymen to start building up their herds by the addition and use of a pure-bred sire. The question of the importance of the sire at the head of the dairy herd has been discussed and proven so often that it is almost an axiom. Almost everyone realizes that a man's future with his dairy herd depends almost entirely on the bull he uses *now*. Nearly every farmer knows that he should head his herd with a pure-bred bull of advanced registry, or registry of merit breeding. In the past, the cost of this kind of sire has prevented many from making a purchase; however, at the present time, anyone can purchase bulls with the best of breeding at a nominal figure.

I am at this time heartily in favor of the better sire campaigns which have been inaugurated and especially do I think that community breeding by means of the co-operative bull clubs will bring about more economical production and assure dairy prosperity.

The foundation for the industry in this state has been laid carefully and sound. As an indication of this, I have but to refer you to the scores of sanitary, modern creamery buildings of fireproof construction erected the past few years by farmers' co-operative associations, which are taking the place of older frame buildings, which indicates that the farmers are planning to stand by this industry.

Although this country has manufactured more dairy products than was ever produced in one year before, it is gratifying to know that consumption has kept pace with production, which is indicated by the fact that there is less butter in cold storage November 1, 1922, than on that date in 1921, the public having consumed all of this year's enormous increase. We are inclined to believe that this is due to the continued decline in prices, which has enabled everyone of moderate means to use creamery butter instead of oleomargarine, which was in demand when butter was beyond their reach in price.

However, much credit should be given the publicity and educational campaigns which the dairy organizations have carried on through the National Dairy Council. This work has tended to awaken the public to the necessity and value of dairy products in the diet. The results of this work have been especially noticeable during the past year.

Consumption within the state has also kept pace with production, as reports from creameries show that they sold 25,714,769 pounds at home, which is 3,087,486 pounds more than they disposed of locally during 1921. The following table showing the amount of creamery butter sold in Iowa during the past ten years may be of interest:

1912	12,694,729 lbs.
1913	14,716,555 lbs.
1914	15,105,725 lbs.
1915	15,842,119 lbs.
1916	16,439,883 lbs.
1917	12,958,678 lbs.
1918	16,827,457 lbs.
1919	15,842,119 lbs.
1920	18,719,251 lbs.
1921	22,627,283 lbs.
1922	25,714,769 lbs.

The foregoing figures represent butter manufactured by Iowa plants and does not include butter consumed within the state manufactured by plants located in adjoining states.

Please note that the consumption during 1922 is practically twice the amount consumed during 1917.

CREAMERY BUTTER

ONE OF IOWA'S BIGGEST ASSETS

Iowa went over the top during 1922, and we have another banner year in the production of creamery butter. Our creameries manufactured 124,168.089 pounds of butter, which is 25,740,419 pounds more than was ever manufactured in this state before.

The foregoing figures show a gain of 25.7 per cent over 1921 and, although the market price has declined during the year, the total value of creamery butter manufactured has increased, due to the enormous increase in production.

This year's output sold for $48,462,805.12. This is $565,999.83 more than the total value last year. We are satisfied that the quality of Iowa butter is steadily improving. The past few years show some rapid strides forward being made in a great many communities, especially where cream grading, scoring, and improvement contests have been started.

The progress with this line of work was at first very slow, but as the work progressed and results began to appear, creameries became interested until at the present time the Dairy Extension Department of the Iowa State College, who have had charge of this work, are unable with their small force of men to accommodate all of the creameries desiring to get started with this work.

Some of the dairy inspectors in this department have been assisting as much as their other duties would permit and no doubt during the coming year we can arrange to be of a great deal more assistance than we have in the past, providing we begin early in the year to plan our work and outline a plan whereby we can co-operate with the creameries and everyone interested in this work, with the idea in mind of getting as many plants as possible interested.

Grading of cream has many advantages and few disadvantages. Such work should be thoroughly studied first. More failures are due to the fact that a careful study of the problem has been neglected than any other one thing. If you have never paid according to grade the best thing to do is to get in touch with this department, the dairy department of the Iowa State College, or some creamery where they are grading successfully.

Not all of the interest in grading and cream improvement has been centered in the co-operative plants, as practically all of the large centralized plants in this state have been holding meetings, etc., during the past year and are completing plans for the adoption of a grading program for their many stations which are distributed over the entire state.

These pigs were started on their rations at the same time. The one on the left had wheat meal and wheat gluten as its source of protein; weight, 55 lbs. The one on the right received wheat meal and skimmed milk in approximately the proportions 1 to 1, weight, 165 lbs.

Early last spring the creameries operating stations in Monroe, Appanoose, Wapello, Davis, Jefferson, Van Buren, Henry, Lee and Des Moines counties, located in the southeastern part of the state, started a grading program as a sort of tryout or experiment and, although the proposition was not pushed as it should have been and was not followed up properly, yet the results were such that all the companies interested are satisfied and are at this time outlining an extensive program for the coming year.

We have during the past year found that the regulations covering cream grading which have been issued by this department needed some slight changes, and, after consulting the dairy department of

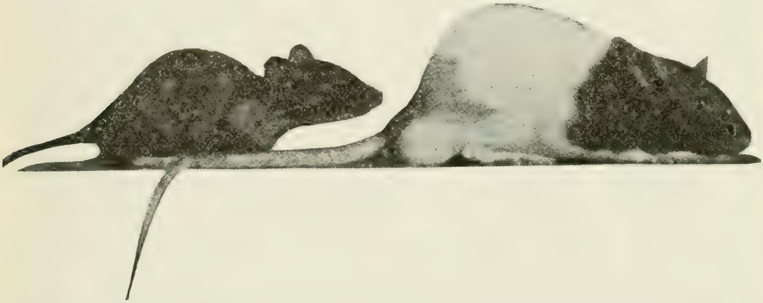
Iowa State College and representatives of all the creamery and dairy organizations, we have now amended them so that we think they cover the situation thoroughly.

MARKET MILK

The increased production of market milk noted last year has continued during this year and much to my gratification statistics gathered by the department show that there has been an increased consumption of this valuable food.

Figures compiled show a 10 per cent increase in the use of market milk, while the value this year of all market milk sold in the state was $24,664,968.34, as against $24,869,492.83 last year. This is accounted for by a reduction in the price.

The value of milk in the diet, especially that of children, cannot be overestimated. The experimental evidence which has been obtained is so overwhelming in its results that every diet should contain a liberal amount of milk. Numerous cases are on record where under-weight and under-nourished children have been brought up to normal by adding milk to their diet. Many of our public schools are giving the children milk to drink each day and in every case an improvement is noted in the studies and the appearance and activity of the children. Milk furnishes the material to make bones and teeth, and keeps the heart beating regularly, strengthening the nerves and every part of the body. It has a growing force which makes weak bodies grow into strong ones and keeps healthy bodies healthy. In addition to the mineral salts and the easily digested proteins contained in milk, there are the vitamines so essential to growth and proper development of the body. Many experiments have been conducted on animals to show the presence of vitamines in milk, which



Plant oils lack vitamine A, without which growth cannot proceed. The rat on the left received 5% of cotton seed oil and the one on the right 1.5% of butterfat instead of cottonseed oil; otherwise the rations were alike and the rats were the same age.

produce these results, and in every case the animal which received milk in its diet develops normally, while the animal deprived of milk is backward and under-weight.

In noting the value of milk as a food it is understood that reference is made to milk that is produced from healthy cows and handled with due regard to its cleanliness. This department, for a number of years, has been doing much work to improve and keep safe the milk supply of the various cities of the state. Frequent tests and inspections of the dairies are made with this in view. Many cities have passed ordinances regulating the quality of milk. The value of milk as a food and the need to have it pure is generally realized.

MILK MADE THE DIFFERENCE

These two dogs were fed the same diet except that the larger dog received milk. They are both from the same litter.

To stimulate interest among dairymen for milk of high quality, the department holds an annual market milk contest between the different cities in the state. This contest is held the week previous to the Dairy Cattle Congress and the results and samples of the milk are placed on display there. Council Bluffs had the highest score with 82.67 points; Mason City was second with 80.88 points, and Dubuque third with 78.57 points.

ICE CREAM

The ice cream industry has gone through another strenuous year, with both manufacturers and retailers doing their best to get back to normal. This they have accomplished so far as high manufacturing costs, express rates, shortage of ice, and poor collections would permit.

Both the retail and wholesale price was reduced somewhat. This has had a tendency to increase consumption. Figures we have been able to compile show that 5,748,185 gallons were manufactured this year, as compared with 5,580,763 gallons during 1921.

Although we have had an increase in the amount manufactured, there has been a decrease in the total value.

Total sales of the product during 1922 amounted to $5,460,775.75, as compared with $6,138,839.30 during 1921, which is due, of course, to the decline in price.

High express rates have been a disadvantage to some manufacturers and have compelled some to establish small plants at different points in the state which has enabled them to eliminate long hauls by express.

We hope that a great many of the difficulties confronting this industry in Iowa can be overcome and ironed out during the coming year. On account of its palatability and food value, there is no other product that is sometimes termed a luxury which comes nearer being a necessity. With this in mind, we believe that the sooner we return to a generous ten-cent dish of ice cream, the greater the consumption will be and the consumer will be thereby benefited because of the essential life-giving properties contained in this popular dairy product. This increased consumption will likewise be of financial benefit to both manufacturer and dealer.

CONDENSED MILK

Iowa's two condenseries increased their output this year. Their product sold for $408,641.48, as compared with $372,678.05 during 1921.

This state imports large quantities of this product; in fact, production never has equaled the demand. Imitation evaporated milk has been making considerable headway in this state due to the fact that it retails for less money and the merchant with most brands has a larger margin of profit, which encourages him to push the sale of the imitation product in preference to genuine condensed milk.

We have found many merchants advertising and selling these imitation products as regular condensed milk and the department has found it necessary to make numerous prosecutions of these offenders.

Imitation evaporated milk, or, as it is more commonly known, "filled milk," is condensed skim milk to which has been added cocoanut oil which was designed to take the place of the butterfat which the milk originally contained.

We believe it is unfair to allow manufacturers to place on the market in the state of Iowa a product which has been deprived of a large amount of its food value. Wisconsin and several other states have already passed laws prohibiting the manufacture and sale of "filled milk." In Wisconsin the constitutionality of this law was contested and the courts have held that it was constitutional.

A bill known as the "Voight Filled Milk Bill" is also before congress at this time, which prohibits the interstate shipment of this product. This bill passed the house of representatives with a large majority and is now being considered in the senate.

We believe that a law similar to the Wisconsin law should be passed in this state.

CHEESE

The manufacture of cheese in this state is almost a thing of the past and unless conditions change a cheese factory soon will be looked upon as a relic of bygone days.

During 1920 we had seventeen factories operating; during 1921 this was reduced to ten, and we now have but five who have been able to survive and continue operations.

These five factories only manufactured 256,415 pounds of cheese during the past year. This is a lamentable condition, as this state consumes large quantities of cheese and we have a great many communities that could be benefited by establishing cheese factories.

THE STATE BUTTER MARK

Increased interest concerning the use of the Iowa butter mark has been very noticeable on the part of both the creameries and the butter buyers during the past year. More creameries have qualified for the use of the brand this year than have ever qualified during any year since the brand was established. Most of those qualifying during the past year have been located in Bremer county, and we hope during 1923 that the creameries in this county will be able to say that they are 100 per cent state brand.

The fact that so many creameries located in one county have started using the brand has attracted the attention of a great many buyers and several of them have been negotiating to purchase the entire output of all these plants, getting the product together at some central point and shipping to the markets in carload lots.

We believe as more creameries begin using the state brand and larger quantities of this quality of butter are available that the competition and interest on the part of buyers will be more noticeable. We also believe that the consumers of this state are anxious to obtain our state brand butter and are willing to pay a premium for it providing the creameries will get together and arrange to place their product on our home markets.

License No. 1 was issued to the Strawberry Point Farmers' Creamery in May, 1916, and since that time 18 creameries have been issued licenses, 2 of which have been forced to discontinue the use of the brand, which was due to various local conditions affecting both plants.

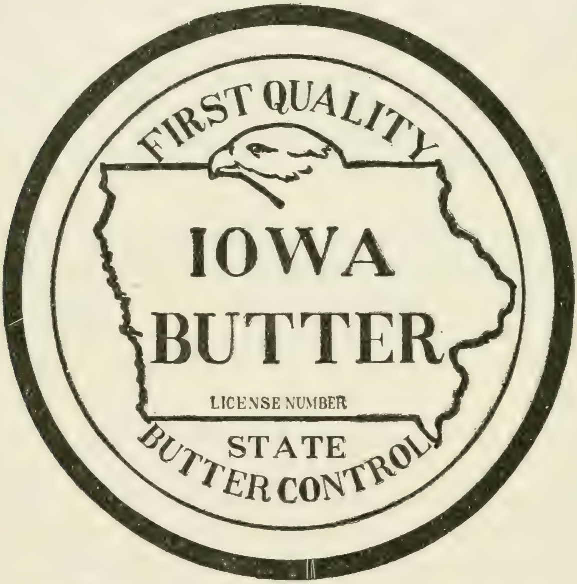
We think that the butter makers who have been able to line up their creameries so that they could meet the strict requirements necessary to be able to use this brand have never been given as much credit as they should have had for the pioneer work they have done; neither have they or the creameries using the brand had the publicity due them.

The state of Iowa created and adopted the state trade-mark for butter manufactured in the state of Iowa "for the purpose of insuring a higher standard of excellence and quality, and to insure a more healthful product for consumption at home and abroad." Furthermore, it is the purpose of the law to promote educational work which will assist the Iowa butter makers in producing the butter to be marketed under the state trade-mark and thereby secure a more uniform butter market and a higher market value for the butter.

The mark as adopted consists of a heavy circle with an inner light circle, the center space being occupied by an outline of the map of Iowa and within the outline shall appear in prominent letters the words, "Iowa Butter." In the space above the outline and within the light circle shall appear the words "First Quality. License No. ——" and the words "State Butter Control" shall be inserted in the space below the outline of the map and within the light circle.

Said trade-mark and its use and regulations shall be in charge of and under the control of an executive committee of five members, consisting of the president of the Iowa State Dairy Association, the president of the Iowa State Butter Makers' Association, the dean of the Division of Agriculture of the Iowa State College of Agriculture and Mechanic Arts, the professor of Dairying of the same institution and the Dairy and Food Commissioner of the state of Iowa.

The state trade-mark shall be controlled, used, manufactured and issued under such rules and regulations as may be found necessary, from time to time, by the executive committee. Such executive committee shall have power to make such changes in the rules and regulations for the use of the said trade-mark as it may from time to time deem necessary.



Trade-Mark Adopted for First Quality Iowa Butter.

The rules governing the use of such trade-mark shall be published by, and through bulletins issued by the State Dairy and Food Commission. Such labels, stamps, or other means of imprinting such trade-marks upon the manufactured product, or the receptacles containing the same shall be furnished to those entitled to the use thereof by the State Dairy and Food Commissioner at actual cost.

RULES AND REGULATIONS GOVERNING USE OF THE IOWA BUTTER TRADE-MARK

1. Butter sold under the trade-mark shall be manufactured in a creamery which meets the requirements of the Iowa Sanitary Law. Such creameries shall obtain a score of 85 or above, 100 being perfect, scored in accordance with the Iowa State Score Card for creameries.

2. The butter shall obtain a score on the quality of not less than 93 points, 100 being perfect, on 75 per cent or more of the scoring. A creamery obtaining a score on butter below 92, or a creamery that has more than 25 per cent of its scoring below 93, shall forfeit its right to the use of such trade-mark until such time as the creamery is again in a position to meet the necessary requirements.

3. All butter marked with the Iowa state mark shall comply with the Iowa state standards and contain not less than 80 per cent of butterfat, and shall contain less than 16 per cent of moisture. No preservative, neutralizer or adulterant shall be added to butter or to cream from which the butter is to be manufactured.

4. Butter sold under said mark shall be manufactured from cream, which has been pasteurized, either in the form of milk or cream. Pasteurization shall consist in heating the milk or the cream to a temperature of not less than 140 degrees F. and holding above 140 degrees F. for a period of not less than 20 minutes, or heating the milk or cream to a temperature of not less than 180 degrees F. when flash heat is applied.

5. If the butter is solid packed in tubs, the tubs shall bear the Iowa state mark on two opposite sides, the marks shall be placed immediately below the upper hoop or hoops, said mark to be three inches in diameter. In addition to the markings as stated, the top surface of the butter shall bear an imprint of the said mark, this imprint to be five inches in diameter and the imprint into the butter shall be from one-sixteenth to one-eighth of an inch in depth. Butter in boxes either solid packed or in print, shall bear similar markings on both ends of the boxes as those placed on the outside of the tubs. A similar imprint shall be made into the butter if solid packed.

6. The date of manufacture of the butter shall be marked on the outside of the tub or box close to the state mark, in letters not less than one-half inch in height, the same being placed in the following manner: $\frac{12\text{-}5}{6}$ The figure 12 designates the number of the month the figure 6 designates the day of the month, and the figure 5 designates the number of the churning on that day. Thus for the above markings the reading would be that the butter was manufactured on the twelfth month, sixth day and was the product of the fifth churning.

7. Parchments for print butter may be marked with the state trade-mark. The size of such markings shall be two inches in diameter. At this time the board does not require the marking of the date on individual prints.

8. Application, in writing, shall be made to the State Dairy and Food Commissioner, who after having satisfied himself that the manufacturer is qualified to comply with all the requirements will issue permit to use the state mark and also furnish copies of the mark and necessary equipment to the applicant. No other stamp or marking shall be used unless the same shall meet with the approval of the State Dairy and Food Commissioner.

9. Any creamery obtaining the privilege of using the Iowa state mark shall immediately upon request from the executive committee, send packages of butter for the purpose of scoring, to such places and in such quantities as may be designated by the executive committee. This butter shall be taken from the most recent churning made at the creamery. The butter after scoring will be disposed of, as nearly as possible, in accordance with the instructions furnished by the creamery.

10. The state dairy law makes it illegal for any person, firm, corporation, association or individual to use the said trade-mark for butter on their products without first complying with all the rules and regulations prescribed by the said executive committee for the use of the same.

11. Any person violating any of the provisions above shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five nor more than one hundred dollars or by imprisonment for not less than thirty days in the county jail. [Dairy laws of the state of Iowa, section 2515-g.]

IOWA STATE DAIRY ASSOCIATION ACTIVITIES

J. P. Eves, Field Secretary

The year 1922 has shown a continuation of the dairy interest so manifest during the previous year. The maintenance of a very satisfactory butter market together with a continuation of low grain prices has maintained the ever-increasing interest in dairying and the demand for dairy cows. Iowa has long been following, more or less, a so-called dual-purpose type, but during the past year a decided change has been apparent. In practically every portion of the state where there was a decent market for milk or butterfat, demand for cows of our special purpose dairy breeds has been rapidly increasing. This condition is gratifying since permanent dairy development was impossible unless based on our dairy breeds as a foundation.

One drawback to the most rapid development of the industry has been the fact that Iowa has been made more or less of a dumping ground by neighboring states for their inferior quality dairy cattle.

In many instances, these cattle went into communities as the first representatives of their particular breed and in such cases have acted in retarding the development of that breed rather than increasing its popularity.

Our Iowa farmers have not been accustomed to paying the prices demanded by breeders for the highest producing quality of dairy cattle, hence they have been inclined to buy representatives of that breed that they could secure for their price. This condition, together with the fact that we have had too many speculators shipping in cattle from terminal stock yards bearing the marks of dairy breeds and sold as high-grade dairy cows, have been severe detriments to the industry.

Figures alone give us an idea of the actual amount of money invested by Iowa farmers in dairy cattle during the past year. Accurate figures from Minnesota and from Wisconsin for the year ending June 30, 1922, show some surprising facts. Dr. S. G. Eliason, state veterinarian of Wisconsin, reports that 5,379 head of dairy cattle were shipped into Iowa during the year mentioned, the total valuation of which amounted to $516,240.00. Dr. Charles E. Cotton, secretary of the Minnesota Live Stock Sanitary Board, reports that during the same year Minnesota sold into Iowa 6,001 head of dairy cattle valued at $558,260.00. These figures show that from Wisconsin and Minnesota alone Iowa purchased 11,380 head of dairy cattle at a valuation of $1,074,500.00. When we consider that many cattle were imported from Illinois, Missouri, Ohio, and other neighboring states, it is a safe estimate that our farmers purchased better than a million and a half dollars worth of dairy cattle or approximately 15,000 head. This amount of money was sent from the state during a year that our banks were supposedly harder pressed than any like year in their history.

These figures and the statements mentioned before would indicate that Iowa is very rapidly turning from beef raising to dairying. I do not want to give the impression that such a rapid change is being made. We must consider that a percentage of the men making this original investment in dairying are not dairy men, will not be permanently interested and many will be out of the business within a very few years with little profit to show for their experience.

BREEDERS DEMONSTRATE POSSIBLE PRODUCTION BY TESTING

The dairy breeders of the state have been doing a good job of bringing the producing ability of our representative breed more definitely to the attention of the milking farmers. The Holstein state milk record, which formerly stood at 26,300 pounds, has been beaten by two cows in the same herd. O. L. Hamer, Waterloo, with the great cow, White Beauty Concordia, and her half-sister has won this new honor. White Beauty completed her year with a production of 28,495.7 pounds of milk containing 1,107 pounds butter. These records are all the more creditable when we consider that they were made not by an experienced feeder or by one of our largest and best equipped farms, but by a practical farmer.

The Guernsey and Jersey breeders have both made remarkable strides. Possibly from the standpoint of state records made, the Sherman Nursery Company, at Charles City, holds the largest place in the limelight. Two state records have already been broken by cows owned in this herd. Brown Lady's Little Jewel is the new junior four-year-old champion. She produced in one year 12,290 pounds of milk containing 655.17 pounds butterfat. The other Sherman farm champion is the junior two-year-old heifer, Raleighs Torono's Lady, with a year's production of 10,237 pounds milk containing 563.5 pounds butterfat.

Still more important, in my opinion, is the information contained in the annual Iowa Cow Test Association report recently issued by the extension department at the Iowa State College. It must be remembered that these records are made with just common farm care with twice a day milking, so that extreme production is not to be expected. Five herds in the state averaged over 400 pounds of butterfat per cow for the year. This production is two and one-half times as much as the average herd production in Iowa. These herds averaged $80.00 to $100.00 profit per cow above feed cost. Of the 322 herds tested, 62 herds averaged 270 pounds of butterfat per cow.

The foregoing statements are made to give just a little indication of the trend of dairying in the state. The interest has been growing by leaps, but we have discouraged rather than encouraged this rapid change, believing that too large a percentage of these beginners would lose rather than gain. A much more permanent and feasible plan and one that is urged at all times is to *feed the present herd more efficiently so as to make possible maximum production; test production of present herds in order to discard the unprofitable or boarder cows; and then select more carefully, breed for production dairy sires.*

1922 PROJECTS

DAIRY CALF CLUB WORK

The boys' and girls' dairy calf club work has been steadily growing in popularity because it is realized as one of the safe, permanent methods of increasing dairy interest and introducing the right kind of dairy cattle. The kind of clubs organized during the past year varied somewhat with previous years. With conditions unsettled, people were more reluctant to push the purebred club, but the clubs organized with grade calves increased in popularity.

The bankers in all parts of the state showed a splendid willingness to co-operate and push the project whenever they were asked. This support, of course, includes, in most instances, the entire financing of the club.

The number of clubs organized does not indicate the amount of time or effort required from the office in the field. All of our purebred clubs and some of our grade clubs are organized on a three-year basis. This requires follow-up work on the clubs organized one and two years previous in addition to those just started.

The three year or "long time" feature of our Iowa clubs is proving a very popular one because it gives each member a well-rounded experience not only in the care of the calf, but the growing out of that calf into a cow, the problem of selecting a correct kind of a sire to breed to and being made to realize the possibility in reproduction when the calves from their club heifers are dropped and the profit to be made from the production of milk and butterfat.

1922 CLUBS

Pure-Bred Calves

Organized by	No. of Calves	Breed
Polk Co. Guernsey Breeders' Ass'n	13	Guernseys
Fayette Co. Farm Bureau	12	Holsteins
Linn Co. Guernsey Breeders' Ass'n	13	Guernseys

Grade Calves

Organized by	No. of Calves	Breed
Hancock Co. Farm Bureau		
Crystal Lake	20	Holsteins
Garner—Co-operative Creamery	7	Holsteins
	2	Guernseys
Kanawha—Co-operative Creamery	7	Holsteins
	2	Guernseys
Kossuth Co. Farm Bureau		
Titonka	21	Guernseys
	4	Holsteins
Lone Rock	9	Guernseys
	4	Holsteins
Fenton	5	Guernseys
	4	Holsteins
Poweshiek Co. Farm Bureau		
Brooklyn	8	Holsteins

CLUB EXHIBITS AND JUDGING CONTESTS

In order to make our clubs a success much time and effort must be spent in arranging for means of bringing members together in friendly competition. Club exhibits, judging contests, etc., have proven very popular, as well as their educational value. In practically all of our clubs a calf club show and judging contest was held in connection with the county fair. At this time the five best calves from the various clubs and the three best junior judges were selected to compete in the contest held, under the supervision of this association, at the Dairy Cattle Congress at Waterloo. From this contest the three high members were selected to represent Iowa at the National Dairy Show.

The State Calf Club Show was held at the Dairy Cattle Congress and proved a real success, even though it was the first state exhibit. Fifty head of splendid heifers were proudly shown by their youthful owners.

BREEDERS' ASSOCIATION

Representatives from this association in the past have always worked with and co-operated with the dairy breeders of the state, but it has been our opinion that this plan could be improved upon. Accordingly, a plan was agreed upon in which this association would perform a more definite work for the dairy breed associations and could then in turn expect a more liberal and loyal membership.

This plan includes a close co-operation of this association with the state breed associations. The representatives of the dairy association handle the field secretary work for the dairy breed associations, providing these organizations maintain their own organizations and finance same. The breed associations in turn guarantee membership in the State Dairy Association. This year the membership will run very close to the 1,000 mark by the end of the year.

By this plan of co-operation, the dairy association is able to get county breed associations to accept a definite program of work. With all of these breeders pushing the same plan that representatives of the dairy association are, there can be no doubt of the increasing results. During the past year we have worked through fifteen such county organizations.

EXCHANGE BUREAU

Through the co-operation of the state and county breed associations, and a close touch, in this way, with all breeders of the state, this association is able to handle a much more effective exchange bureau. A pretty definite file of grade and pure-bred cattle for sale in the state is kept at the association office and, in this way, buyer and seller are brought much closer together. We are trying to encourage Iowa inquirers to buy Iowa cattle because we believe they can come more nearly finding out the real value of the animal they are buying and can be more safely protected in their purchase.

CO-OPERATION OF EXTENSION ORGANIZATIONS

We are pleased to report that we have never experienced a more wholehearted and sincere co-operation from dairy and extension organizations than during the past year. The extension department, the dairy husbandry department, and the dairy manufacturing department of Iowa State College, the Dairy and Food Commission, and the State Dairy Council have co-operated with us and given us assistance whenever it was in their power.

PROJECTS FOR 1923

The plans for 1923 include an expansion of the work carried on this year. One representative handled all of the work for better than half of the past year. We are assured of the financial support of the dairy breed associations, of membership funds, and we hope these will be sufficient to make possible the retaining of two representatives for the entire year, even though our small state appropriation will not. Without two men it is impossible to continue the old work in anything like an efficient manner and still handle the increasing demands.

IOWA EGG LAW

As has been frequently stated in previous annual reports, the purpose of the Iowa egg law is to promote fair dealing in eggs and increase the market value of our egg crop. In justice to most of the dealers in eggs I will say that they so take it, but there are some, more than there should be, who seem to feel that any restriction on their manner of doing business is an infringement upon their personal liberty.

It is the purpose of this department in making rules and regulations for administering the law to not only encourage the merchant who is disposed to be fair, but to protect him from the disastrous results of unfair buying. Also to encourage the farmer to market a better class of eggs. When you consider that during the spring months when we get our best eggs it takes 45 dozen eggs on the average to make a 30-dozen case of standard or No. 1 eggs, 15 dozen going into secondary grades (and this does not include the bad eggs that are rejected), you get some idea of what indifference on the part of the farmer as to what kind of eggs he markets has to do with the price he receives. The percentage of seconds has to be taken into account by the packer who makes the price.

During the hot and early fall months the percentage of seconds is much greater. There are times in the extreme hot weather when there are scarcely any No. 1 eggs except those furnished by near-by henneries, often No. 1 April packed storage eggs being preferred to the current receipts. It has been estimated that this state alone suffers a loss each year of $5,000,000.00 to $6,000,000.00 because of the indifference of so many of our farmers as to the kind of eggs they produce and the manner of their handling.

That it pays to give more attention to the quality of your product is evidenced by the fact that the price paid by the merchants and dealers in certain communities invariably ranges from two to five cents higher than in most places. Admitting that competition may in part account for this at times, I think you will find on investigating that in the majority of cases the quality of the eggs enables the dealer to pay more.

The following tabulations will be of interest, as it shows the variations in price one month with another for the last twelve years. Also it compares the receipts and prices of this year with those of last. We are getting back close to pre-war prices.

EGGS

No. Doz. 1921	133,100,000
No. Doz. 1922	159,720,000
Average Price 1921	38.6c
Average Price 1922	27.26c
Total Value 1921	$51,376,000
Total Price 1922	$43,539,672

AVERAGE PRICE PAID TO IOWA FARMERS FOR EGGS ON THE FIRST DAY OF EACH MONTH OF THE YEARS SHOWN

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910	28	28	21	18	18	17	16	14	17	20	22	25
1911	26	21	14	13	14	13	12	12	14	17	20	25
1912	27	28	23	17	17	16	15	16	17	19	22	25
1913	23	20	17	15	15	16	15	14	16	19	23	29
1914	27	26	22	16	16	16	16	16	20	21	21	26
1915	28	30	22	16	17	16	15	15	16	20	23	27
1916	28	27	22	17	18	19	19	20	21	26	30	34
1917	35	36	33	25	30	31	27	28	32	34	35	39
1918	42	47	38	30	31	28	28	33	33	39	42	51
1919	56	45	30	34	37	38	33	37	38	47	52	59
1920	55	45	39	37	38	33	37	44	48	53	64	61
1921	49	32	21	18	16	20	22	26	27	37	46	44
1922	26	23	18	20	20	16						

NECESSITY FOR STRICT ENFORCEMENT OF THE SANITARY FOOD LAWS

Sanitary food laws have been of inestimable value in procuring for the public a safe food supply. Wholesome foods are easily made dangerous by being handled or stored under insanitary conditions. Methods which obtained in the manufacturing and handling of our food supply a few years ago are a far cry from present-day methods, due to the enactment and enforcement of sanitary laws. Food officials found it difficult and were often met with opposition in trying to enforce these laws when they were enacted. The installation of cases to protect foods often involved considerable expense and the average dealer was loath to spend any money to safeguard the health of the public. Many can recall to mind the confectionery with long counters covered with trays of many hued candies with the prospective customer picking over and tasting the different varieties in search of one that struck his fancy. I dare say in many cases these counters of candy were not even covered during the process of sweeping to remove the dust and dirt tracked in from the street on the feet of customers, mixed with the expectorations of those possibly tuberculous.

An illustration of these conditions is recalled wherein a large department store maintained a candy department of the "hollow square" type. The owner was advised that it would be necessary to put the candy in cases which would protect it from the contamination with dust and dirt. The order was complied with with some reluctance, but efficient plate glass cases were installed. In visiting this store to see if the order had been complied with, it was noticed that the clerk was busily engaged in wiping a very perceptible layer of dust from the top of the case. Upon inquiry as to how she liked the new case she complained that they kept her busy cleaning off the dust. When asked where the dust went before the cases were installed, she admitted that it must have collected on the candy. Many even more glaring instances of food contamination can no doubt be cited by many food officials.

In conjunction with the fight against dust and dirt in our foods there has been waged a relentless war against the housefly, possibly one of the greatest spreaders of the "white plague" and many other diseases of mankind. It is a wise provision that requires the use of proper screens over all openings in buildings or rooms where foods are handled, but in many instances, without the occasional visit of the inspector, these would be allowed to become full of rust holes and worthless. Sanitary laws have been directly responsible for the nation-wide educational campaigns, conducted in the various states, showing by circulars sent out by boards of health and food officials, the real menace of the common fly. His deadly work has been painted in pictures and recited in verse. Traps have been designed to catch him in vast numbers by means of an enticing bait and many cities have offered rewards for the boy or girl who could catch the largest number. Official bulletins point out his breeding places and tell of the proper treatment of these places to destroy the eggs and reduce his numbers. I venture the prophecy that the time will come when the law will require the destruction of the common rat, as he is a contaminator as well as a destroyer of foods. It is encouraging to know that in practically every case where dealers in food products have been compelled to install proper protection for foods that they say they would not think of returning to the old system; in fact, many have exceeded the requirements and invested heavily in plate glass cases with white tile floors which are easily cleaned and display their foods in an enticing manner. Cabinet manufacturers quickly saw the value of sanitary food display cases and many on the market today are the last word in the cabinetmaker's art. The reputable dealer has likewise recognized their value and their installation is a part of every modern grocery and market. From what I have said it might seem that the millennium in food sanitation was near, but we are far from it. Visit any of our large cities and you are likely to find bakeries being operated in basements with little ventilation and only artificial light and utensils of doubtful cleanliness. These places, although comparatively few, exist for various reasons. They have been found by the inspector and have been made to improve, but the owner is a man of small means, industrious, and a respectable citizen. He would like to have his bakery in a modern room, but he has not the means to buy or rent such a place and we suffer him to continue in such a place with the best possible sanitary conditions under such surroundings. Officials are in part excusable for such conditions, but food officials should strive for the elimination of every bakery or food factory in any basement not one-half above the ground with ample daylight and cement floors.

There is one class of manufacturers which should not be tolerated and that is the small bottler of soda waters who rents a shed or a ramshackle back room and with a foot-power bottling machine and a tub of warm or possibly cold water for washing his bottles makes a product which he offers to the public as a cool, refreshing beverage. In many cases these men are foreigners of the lowest class, with little or no conception of cleanliness, and there is enough authority in our laws to eliminate such places completely, and officials are derelict in their duty if they permit food to be produced under such conditions. Another problem which the food officials have to contend with is the foreign grocer and butcher in the foreign sections of our larger cities. They are in most cases naturally unsanitary and their customers being of the same or similar extraction are content to let them operate in this manner. Frequent inspection and the force of the law seems to be the only method which will maintain any semblance of proper sanitary methods and surroundings with this class of merchants. While the sanitary laws have improved the country slaughterhouse which was overrun with rats and surrounded with nauseating filth, such places should be eliminated, for such an institution has no place in modern times.

We can all remember when the butcher's wagon drove about the city loaded with dressed meats and unprotected from the dust and filth constantly stirred up by the wind. Bread was even transported about unwrapped and in open delivery wagons, the driver handling the horses and no doubt his person without any attempt at washing his hands. The unwrapped loaves were corded up on his dirty coat sleeve, carried into the grocery and dumped into an open basket to be further exposed and handed to the customer by hands of doubtful cleanliness. As usual, there was some opposition to protecting these foods, but the white canvas cover is now in general use on meat wagons and trucks and the baker has been quick to realize the sale value of his loaf of bread wrapped in a decorated transparent wrapper which advertised his product as well as protecting it from all possible contamination. Viewing the past and the present the efforts put forth by food officials to bring about these changes have certainly been worth while and they can be justly proud that they have had a part in this transition.

The proper control of dealers in foods can be had, I believe, by means of a licensing system, making the license fee nominal, but placing with it the power of refusal and revocation. Our sanitary laws should require every person who wishes to handle foods in any way to have his place thoroughly inspected before he is permitted to enter the business and his license withheld if the building or room is not suitable for maintaining in a strictly sanitary manner and a license only issued when it is possible to comply with the law in every detail. I believe every official who had had the enforcement of a sanitary law will agree that if we are to maintain a safe food supply the strict enforcement of the law is of necessity and that eternal vigilance will always be the price we must pay.

WEIGHTS AND MEASURES

A decade has passed since Iowa took up in earnest the subject of properly regulating weights, measures and trade practices in general involving these mediums of purchase and sale. True, there was some effort made previous to that time to take care of trade conditions, but not until 1913, when the legislature enacted a law that was to make possible much needed reform in the various branches of trade dealing in essential commodities through the enactment of the weight and measure law. The dairy and food commissioner was charged with the enforcement of this act, the duties of which were to regulate and supervise all matters wherein questions of quantity were involved, also the inspection of scales, weights and measures.

That this remedial action came none too soon is well known, and the beneficial value of such a department as a protective agency has manifestly grown with the general trend of business and constant changes in economic conditions.

Since the enactment of the weight and measure law in 1913 steady advancement has been made year by year in every branch of the work. Special investigation due to various causes are, of course, always in order. No year passes without many of them claiming our attention, and the past year was no exception. Conditions in the various branches of trade must be continually looked into in order to make sure that the persons engaged in them are living up to the law's requirements. If at any time a particular business is not centered upon, it is because conditions in that line of trade are satisfactory to the department. However, just as soon as any tendency is discovered to overstep the bounds of honesty and fair dealing, no time is lost in getting back to that particular branch.

There are extensive commercial enterprises which must always be carefully watched, such as those dealing in coal, ice, groceries, meats and co-related lines of trade. Great stress is laid on the enforcement of weight and measure laws, since they affect the class of citizens who can least afford to protect themselves. Some of the activities are enumerated here in order that the public may know of the work of the department.

It is the duty of this department to make an inspection of scales, weights and measures wherever the same are kept for use in connection with the sale of merchandise or other commodities sold by weight or measurement. The testing of the many thousands of wagon or truck scales and gasoline pumps and measuring devices requires much time and labor. The reweighing of commodities in the various stores and of loads of coal as well as checking up the peddler or huckster, which has always given us trouble. The very nature of the way their business is carried on makes them an object of suspicion. These "roamers" make victims of the rich and poor alike; they have no fixed places of business, frequently drifting fron town to town. They have many tricks at their disposal, as their enterprises usually are of the seasonable variety, their efforts are generally directed toward making a clean-up in the short time they have. Their stocks in trade may be anything from an orange to a ton of coal, though most of them seem to take very kindly to the produce business, for what reason can best be judged when it is realized that in practically no other line of trade is there such opportunity to defraud. It is difficult to realize why the people in general put so much faith in them instead of consistently dealing with reputable merchants with established locations. So-called bargains, which the people think they receive from peddlers are, as a rule, more costly in the end than were the goods purchased at a store. Storekeepers are not so apt to stake their reputations on questionable practices.

The wagon scale or five-ton scale is being replaced by the heavy truck scale, ten-ton and larger. With so much heavy trucking by motors, some of which are almost as large as small freight cars, carrying loads that require scales of large capacity to handle, larger scales are being installed all over the state.

While in most cases incorrect scales are found weighing against the consumer, frequently a scale is found weighing against the dealer.

In a recent inspection of coal scales a scale was found that was giving the consumer 1,200 pounds for each 1,000 pounds. When the inspector discovered the error and notified the dealer he was frantic with grief and endeavored to call in all wagons which were out delivering coal from his bins. The scales were immediately repaired and hereafter no patron of his place of business will get more coal than is paid for.

We find material shortage from time to time in checking up the coal dealers. We have had a number of cases against them; in some cases they plead guilty, in others they stood trial. In one case we had recently the dealer plead not guilty. He was short 525 pounds on a one-ton load. His defense was that the wind blew it away, therefore he was not responsible for the shortage. The judge found him guilty and fined him $15.00 and costs; he should have had the limit.

The inspector, in another instance, made an inspection of a scale and found the same to be 40 pounds light on each 1,000 pounds. They were condemned. They were to weigh 250 head of fancy beef cattle over these scales that day. The price being paid for these cattle was 12 cents per pound and the cattle averaged 1,000 pounds per head. The parties selling these cattle would have lost 10,000 pounds or 10 head of cattle at 12 cents per pound, amounting to $1,200.00, a fair day's work for the buyer.

The inspectors find new scales that are not properly installed. By making the corrections the inspector protects the dealer as well as the public.

A unique bushel measure, made of galvanized tin, was confiscated from an apple peddler by the inspector. The measure is guaranteed to cheat each customer out of at least one-third (⅓) of a bushel of apples every time it is used. The peddler had taken a heavy hammer and banged great dents in the sides of the measure; these dents took up the space which should have been filled with apples when a bushel of the fruit was sold. Housewives should purchase apples by the pound and not by the measure. They should insist on getting forty-eight (48) pounds for a bushel. Many of the measures used will hold only about thirty (30) to forty (40) pounds of apples.

The department continues to receive complaints regarding incorrect scales and requests for scale inspections. During the year ending October 31, 1922, there were 171 requests taken care of.

BREAD

We still receive complaints about loaves of bread not being branded with the net weight, also loaves being misbranded, in that the loaf does not weigh as much as is stated on the wrapper. We have continually tried to remedy this practice, with only partial success. The bakers state that the frequent fluctuation in the price of flour compels them to change the size of the loaf. Wrappers are purchased in large quantities branded with a certain net weight. Then if the size of the loaf is reduced the baker, in many cases, continues to use the same wrapper, leading the consumer to believe he is receiving a larger amount of the bread than he is.

We believe that the only remedy for this condition is a law regulating the size of all loaves of bread. This is concurred in by the United States Bureau of Standards and many of the other states.

A committee consisting of weight and measure officials and representatives of the baking industry are drafting a uniform bread law as a guide to states desirous of such a law. Several states already have a standard bread law, upheld by higher courts.

GASOLINE PUMP INSPECTION

The inspection of gasoline pumps is one of the important phases of our work. During the year ending October 31, 1922, there were 1,682 gasoline pumps inspected, of which 19 per cent were found incorrect; 950 measures, of which 64 were incorrect. During the last year there has been an increase in number of gasoline pumps installed, new filling stations springing up all over the state.

Where the inspector finds a gasoline pump not delivering the correct amount, it is condemned for repairs. In one case the operator continued to use the pump, which was measuring one-half (½) gallon short on each five (5) gallons. Charges were filed, the defendant plead not guilty, demanding a jury trial. The jury found him guilty and he was fined $50.00 and costs.

Refiners and marketers of gasoline are beginning to understand what accuracy means to them in the way of good will and increased sales. They are very anxious that all gasoline pumps and meters are accurate. We have been very much encouraged by the co-operation which has been given the department by the oil companies and the various manufacturers of these devices, with the result that the measuring devices have been remodeled and improved upon.

The law provides that all gasoline pumps and meters shall be licensed, the fee being $3.00 per year.

The revenue received for the gasoline pump licenses for the year ending October 31, 1922, is $12,867.00.

During the year ending October 31, 1922, the department has inspected 3,217 "heavy" scales, that is, scales used by grain elevators, coal mines, coal dealers, railroad stock scales, sugar refineries, canning factories, etc.; 279 of this number were found incorrect and were condemned for repairs; 269 of these have been repaired or new ones installed to take the place of the old ones. The revenue received by the state for the inspection of these scales amounted to $9,870.24.

The law provides an inspection fee for all scales over 500 pounds up to and including 4,000 pounds capacity, which is $1.00; over 4,000 pounds up to and including 21,000 pounds capacity, $3.00 each; scales over 21,000 pounds capacity, not including railroad track scales, $5.00 each; railroad track scales, $10.00 each; all hopper or automatic scales, $2.00 each.

The revenue received by the state for scale licenses is $6,108.00.

The inspection of platform, counter and cream scales is also an important part of our work. Our records show there were 1,386 platform scales, 4,414 counter scales, 3,826 cream scales tested. Of the total number of these scales, which is 9,626, 505 were found to be incorrect, the same being condemned for repairs. A great many of these were found to be weighing in favor of the public. These scales have either been discontinued from use, replaced with new scales or repaired.

The total revenue received by this department, which is $28,845.24, was turned over to the state treasurer and credited to the general fund of the state. This department is operated by a direct appropriation of the legislature and cannot use any of the fees collected.

WEIGHTS OF ONE BUSHEL, ONE PECK, AND ONE QUART OF CERTAIN PRODUCTS AS PROVIDED BY THE LAWS OF IOWA.

	1 bushel pounds	1 peck pounds	1 quart ounces
Apples	48	12	24
Apples, Dried	24	6	12
Alfalfa Seed	60	15	30
Barley	48	12	24
Beans, Green	56	14	28
Beans, Dry	60	15	30
Beans, Lima	56	14	28
Beets	56	14	28
Bluegrass Seed	14	3½	7
Bran	20	5	10
Bromus Inermis	14	3½	7
Broom Corn Seed	50	12½	25
Buckwheat	48	12	24
Carrots	50	12½	25
Castor Beans	50	12½	25
Charcoal	20	5	10
Cherries	40	10	20
Clover Seed	60	15	30
Coal	80	20	40
Coke	40	10	20
Corn, Ear	70	17½	35
Corn, Unhusked	75	18¾	37½
Corn, Shelled	56	14	28
Corn Meal	48	12	24
Cucumbers	48	12	24
Emmer	40	10	20
Flax Seed	56	14	28
Grapes, Stems	40	10	20
Hemp Seed	44	11	22
Hickory Nuts, Shelled	50	12½	25
Hungarian Seed	50	12½	25
Kaffir Corn	56	14	28
Lime	80	20	40
Millet Seed	50	12½	25
Oats	32	8	16
Onions	52	13	26
Onion Top Sets	28	7	14
Onion Bottom Sets	32	8	16
Orchard Grass Seed	14	3½	7
Osage Orange Seed	32	8	16
Parsnips	45	11¼	22½
Peaches	48	12	24
Peaches, Dried	33	8¼	16½
Peanuts	22	5½	11
Pears	45	11¼	22½
Peas, Unshelled	50	12½	25
Peas, Dried	60	15	30
Plums	48	12	24
Pop Corn, Cob	70	17½	35
Pop Corn, Shelled	56	14	28
Potatoes	60	15	30
Quinces	48	12	24
Rape Seed	50	12½	25
Redtop Seed	14	3½	7
Rutabagas	60	15	30
Rye	56	14	28
Salt	80	20	40
Sand	130	32½	65
Shorts	20	5	10
Sorghum Seed	50	12½	25
Speltz	40	10	20
Sweet Corn	55	12½	25
Sweet Potatoes	50	12½	25
Timothy Seed	50	11¼	22½
Tomatoes	55	13½	25
Turnips	50	12¾	27½
Walnuts	60	12½	25
Wheat	50	15	30
All root crops not specified above	51	12½	25

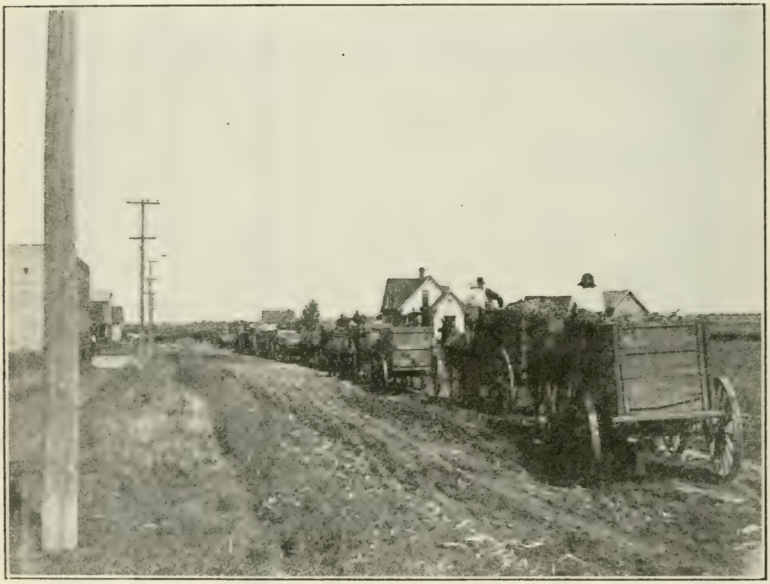
1 dry qt.—67.2 cu. ins. 1 liquid qt.—57.75 cu. ins. A dry qt. holds 14 per cent more than a liquid qt. Dry commodities must be sold by weight or dry measure.

CANNING INDUSTRY OF IOWA

The canning industry of Iowa is a larger agricultural industry than is realized by those not closely associated with it. In view of this fact the following figures and information will give the people of this state an idea of its importance and magnitude.

The principal products packed in this state are: Sweet corn, tomatoes, pumpkin, kraut, and the winter lines of pork and beans, hominy, lima beans, kidney beans, etc. Other products canned in commercial quantities include green beans, beets, spinach and cherries.

Iowa leads the world in canned sweet corn production. The volume of canned tomatoes is small as compared with the output of some of the principal tomato packing states, but the quality of Iowa tomatoes is superior. The tomato, while native to warmer climates, grows to perfection here and judges readily concede that tomatoes grown north of the frost belt are superior in texture and flavor. Accurate statistics on pumpkin packs of other states are not available, but the extent of the pumpkin pack of Iowa has sufficient bearing on the market of the country to indicate that Iowa is one of the principal states in the production of this item.



CORN ON THE WAY TO THE CANNERY

While the volume of the sweet corn pack has reached the limit under existing freight rates, at least for the time being, there seems to be room for increased production of most of the other products.

The corn canning industry is suffering as the result of heavy overproduction in 1920, when the Iowa corn pack reached the total of 3,246,000 cases or 77,904,000 cans. This pack was produced at peak prices, for corn, cans, cases, labor and all other items going into cost of production, and had to be marketed on the falling market for food products which characterized the year 1921. The 1921 pack was very light, but there has been a partial recovery this year. The figures for production and market value for this year are, however, not yet back to normal.

Iowa normally packs one-sixth of the total sweet corn of the country. With the exception of the years 1913, 1915, 1917, and 1921, Iowa has held first place in production; the Illinois packs for each of these years slightly exceeds the Iowa packs.

This year there were 42 plants operated for canning corn; 11 for tomatoes; 6 for pumpkin, and 4 for other products.

The 1922 corn pack was 1,943,000 cases. The tomato pack was 163,819 cases.

The value of the corn pack at prevailing retail prices is $6,000,000.

The value of the pack of canned tomatoes exclusive of pulp and catsup on the above basis is $607,676.00; the pulp and catsup pack will approximate $1,252,256.00 in value.

The annual expenditure for canning labor will exceed $1,000,000.

Acreages in Evergreen corn under contracts with canneries for the past four years, together with approximate average price per ton paid:

Year	Acres	Average price Per ton
1919	47,811	$16.00
1920	47,511	14.00
1921	14,398	9.00
1922	29,710	7.00

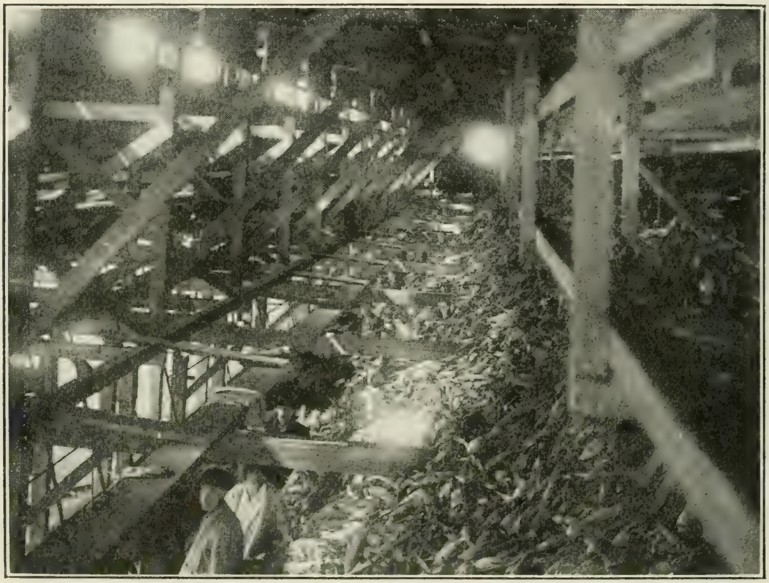
The average price per ton paid in 1914 was $7.00; in 1915, $8.00; in 1916, $8.00; in 1917, $12.00; in 1918, $14.00.

Prices paid at various plants will vary from these prices by allowances for haul, unloading, etc.

IOWA-NEBRASKA CANNERS ASSOCIATION

The Iowa Canners Association last year adopted a new constitution and by-laws and changed its name to Iowa-Nebraska Canners Association to include the four active Nebraska canneries. Eighty-one per cent of the 1922 Iowa pack, or 1,571,000 cases, was canned by Iowa members of the association.

The activities of the Iowa-Nebraska association might be grouped under three heads—general association activities, technological, and sanitary inspection of member plants. General association work includes market survey and extension, freight rates, promotion of uniformity of grades and standards of quality, business ethics, trade statistics and data on acreage, production and stocks and their movement. Technological activities include co-operative work on problems affecting production and quality, such as improving varieties of sweet corn, with respect to yields per acre and quality; seed supply; farming; improvement of canning processes; machinery and equipment problems; bacteriology and technology of sterilization or processing; and container and shipping package difficulties. The sanitary inspection of Iowa canneries by the association itself was instituted in 1919 as a division of the activities of the National Canners' Association. In 1922 the Iowa-Nebraska Canners' Association took over this work in Iowa and Nebraska. Under this service plants of members are inspected both before and during the packing seasons to see that the sanitary rules of the association are complied



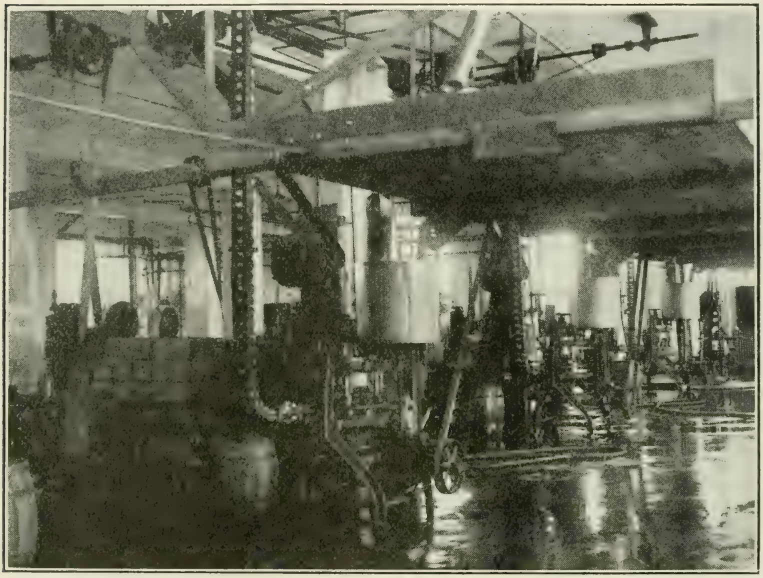
HUSKING ROOM

with. This self-imposed and self-conducted inspection has the advantage that inspections are conducted by a cannery specialist who is thoroughly familiar with all details of approved cannery construction, canning machinery, cannery operations, and cannery problems. It is open to the objection that it is applicable to members only and that the association has no police power with which to enforce compliance with its sanitary requirements, and that the association and its inspectors are legally powerless to enforce regulations against any canner who may be inclined to ignore the inspector's recommendations or instructions. During the past season the department placed one man on the inspection of canning factories so that a general survey could be made and a knowledge of the methods and equipment used by each factory obtained.

CANS READY FOR THE COOKER

His report shows that the majority of the canning factories are properly equipped with buildings and machinery to handle their products in a sanitary manner. Several were found, however, which were operating in old buildings with no proper means to dispose of waste matter, or of keeping floors and utensils clean. We expect next year to make a preliminary inspection of these factories and require such improvements to be made that will enable them to handle their products with strict regard to the legal requirements before the season opens. In case such requirements are disregarded it will be necessary to revoke their licenses which give them authority to operate. The inspection shows that the present sanitary law is too general in its requirements for canning factories.

Written as it is so as to render it applicable to bakeries, confectioneries, packing houses, slaughterhouses, dairies, creameries, restaurants, hotels, groceries, meat markets, and all other places where food is manufactured or stored, our sanitary law neither goes into sufficient detail nor is sufficiently specific to meet the needs of a cannery law. Under the sanitary law canners have difficulty in understanding what is required and the determination as to whether or not certain practices are in violation of the law is quite frequently not possible. To remedy this difficulty the sanitary law should be amended by adding specific requirements for canning factories.



STEAM PRESSURE COOKER

Outbreaks of food poisoning which have occurred in the last few years have stimulated investigations as to their cause and the National Canners' Association, under the direction of Dr. Bigelow, has been active in this work. Other noted workers in this field are: Dr. M. J. Rosenau, of Harvard Medical School; Dr. K. F. Meyer, of Hooper Foundation for Medical Research; Dr. J. C. Geiger, of the U. S. Public Health Service; and Dr. E. O. Jordan, of the University of Chicago. Much of their work is completed, and among their conclusions are the following:

1. That many cases of illness are wrongly diagnosed as "ptomaine poisoning."

2. That of the total 41 known outbreaks of Botulism, which have occurred in this country, but 15 have shown commercially canned foods as the cause; most of the rest were caused by improperly prepared home canned foods or home canned foods which did not keep.

3. That Botulism cannot result from consumption of properly packed commercially canned foods.

The following shows comparatively the total sweet corn packs of commercial canneries for the past five years expressed in cases:

	1917	1918	1919	1920	1921	1922
Iowa	2,280,366	2,300,241	2,496,000	3,246,000	1,190,000	1,959,000
Illinois	2,421,953	2,199,344	2,225,000	2,271,000	1,711,000	1,939,000
Maine	566,498	1,112,912	1,652,000	1,588,000	911,000	1,066,000
Ohio	1,200,131	1,584,064	1,360,000	1,544,000	850,000	1,073,000
Maryland	2,001,544	2,032,944	2,081,000	2,217,000	1,130,000	1,944,000
New York	257,296	488,912	1,014,000	829,000	564,000	616,000
Wisconsin	165,492	372,924	635,000	590,000	576,000	625,000
Indiana	742,491	512,688	586,000	861,000	709,000	665,000
Minnesota	201,969	309,136	456,000	643,000	573,000	598,000
Missouri Michigan Delaware Vermont Pennsylvania	659,087	389,295	777,000	784,000	440,000	701,000
All other States	306,188	419,400	268,000	487,000	189,000	233,000
Total	10,802,952	11,721,860	13,550,000	15,040,000	8,843,000	11,419,000

CANNING PLANTS

The following is a list of the Iowa canning companies, showing locations of plants and products packed in 1922:

KEY: A—Sweetcorn:C—Tomatoes; E—Green beans; F—Pumpkin; I— Hominy; J— Lima beans; K—Kraut; N—Succotash; Q—Beets; b—Cherries; i—Pork and beans; j—Spinach; p—Pulp; r—Red kidney beans; t—Catsup; Sp—Specialties; (N.O.)—Not operated 1922. *Designates principal office of companies operating more than one plant.

Company	Location	Manager	Products packed
Ackley C. Co.	Ackley	T. J. Gilloon	A
Ames C. Co.	Ames	Sid R. Clift	A
Anderson Bros. Co.	Oskaloosa	Jim DeBoard	C
Atlantic C. Co.	Atlantic	J. W. Cuykendall	A-F
Audubon C. Co.	Audubon	R. J. Loveland	A
Baxter Bros. Co. (office, Brunswick, Me.)	Wapello	J. P. Baxter, Jr.	A-N
Belle Plaine C. Co.	Belle Praine	A. C. Geiger	A
Brighton C. Co.	Brighton	W. O. Schafer	p-t
Cambridge Pkg. Co.	Cambridge		(N.O.)
Cedar Falls C. Co.	Cedar Falls	H. S. Gilkey	A
Cedar Rapids C. Co.	Cedar Rapids	E. J. Bealer	C-E-Q-b
Center Point C. Co.	Center Point	R. W. Brookman	A
Clarksville C. Co.	Clarksville	W. Strippel	A
L. E. Denmire	*Montrose	L. E. Denmire	C
L. E. Denmire	Farmington		C
L. E. Denmire	Sandusky (mail Montrose)		C
Dexter-Farmer C. Co.	*Dexter	E. H. Gunter	A-F
Dexter-Farmer C. Co.	Van Horne	Frank Woods, Supt.	A
Elgin C. Co.	Elgin	Al Schori	A
Gilman C. Co.	Gilman	E. W. Virden	(N-O.)
Glenwood Fruit Pro.	Glenwood	A. G. Beamer	C
Grimes C. Co.	*Grimes	W. J. Stewart	A-F-I-J-i-r
Grimes C. Co.	Altoona		(N-O.)
Grimes C. Co.	Pella	E. Hardy, Supt.	A-F
Grimes C. Co.	Perry	L. B. Reeves, Supt.	A
Grimes C. Co.	Rockwell City	Roy Chard, Supt.	A
Grinnell C. Co.	Grinnell	Geo. R. Kelley	A
Growers' C. Co.	Council Bluffs		(N.O.)
Grundy C. Co.	Grundy	L. E. Kinney	(N.O.)
Guttenberg C. Co.	Guttenberg	C. W. Lake	A
Independence C. Corporation	Independence	F. J. Wakerwarth	A
Iowa C. Co.	*Vinton	G. E. Carrier	A
Iowa C. Co.	Garrison	Ben McGirr, Supt.	(N.O.)
Iowa C. Co.	La Porte	C. J. Powell, Supt.	A
Iowa C. Co.	Shellsburg	Harry Bender, Supt.	A
Iowa City C. Co.	Iowa City	Paul Reed	A
Iowa Valley C. Co.	Marengo	B. S. Schwartzbaw	A
Kelley C. Co.	Waverly	O. C. Mitchell	A
Keokuk C. Co.	*Keokuk	W. V. D. Maas	C
Keokuk C. Co.	Ft. Madison		C
Lake Mills C. Co.	Lake Mills	Irving Nelson	A
Merrell C. Co.	Harlan	G. W. Kirtley	A
Marshall C. Co.	*Marshalltown	Merritt Greene, Jr.	A-C-E-F-I-K-N-J-i-j-p-r-t-Sp-
Marshall C. Co.	Hampton		(N.O.)
Marshall C. Co.	Roland	Joe Thompson, Supt.	A
Monticello C. Co.	Monticello	H. M. Carpenter	(N.O.)
Otoe Food Pro. Co.	Hamburg	L. E. Shannon, Supt.	A
Red Oak C. Co.	Red Oak	A. R. Tracy	A
Riverside C. Co.	Hamburg	F. W. Castleman	C
Sac City C. Co.	*Sac City	M. W. Jones	A
Sac City C. Co.	Storm Lake	B. Marchant, Supt.	A
Story Farmer C. Co.	Story City	S. T. Farmer	A
Tipton Farmer C. Co.	Tipton	J. LeRoy Farmer	A
Tripoli C. Association	Tripoli	L. W. Stagner	A
Virden C. Co.	Forest City	L. W. Perry	A
V. F. Farmer C. Co.	Mt. Pleasant	V. F. Farmer	A
Waterloo C. Co.	*Waterloo	S. C. Bell	A
Waterloo C. Co.	Dyersville	O. H. Lake, Supt.	A
Waterloo C. Co.	Dysart	Tom Evans, Supt.	A
Weir C. Co.	Toledo	H. V. Weir	A
Ziegler C. & Pres. Co.	Muscatine	F. L. Grigg	C-K-F-p-t

CONDIMENTAL STOCK FOODS

The law regulating the sale of these products requires, among other things, that the manufacturer pay an annual license of $100. Since the passage of this law several years ago there has been a contention by some of the manufacturers of these products that if their products were not labeled or represented as a food they were not required to pay the license.

The department has had several cases in the courts to settle this matter, but has never been able to get a decision in the higher courts which would establish any certainty as to the requirements for this class of products.

The result is that out of fifty-three manufacturers of these products in the state, but twenty-six have paid their licenses, and the rest refuse on the ground that the law does not include their products. It is unfair to these twenty-six who pay this license to permit the other twenty-seven to operate without paying.

I would recommend that the legislature amend this law in such a way as to clarify the situation and enable the department to enforce it without any misgivings as to the decisions of the courts. The law should define this class of products in such a way as to leave no question as to who is required to pay the license.

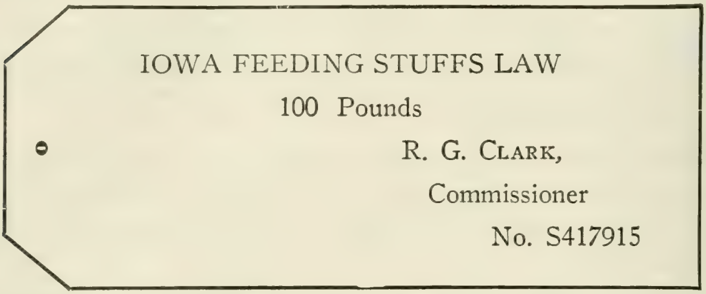
COMMERCIAL FEEDING STUFFS

A list of commercial feeds analyzed by the department is given in the following table. The table shows the analysis as claimed by the manufacturer and that found by the department.

The purpose of the law is to require all commercial feeds which are offered for sale in Iowa to be registered with the department. This registration shows the analysis of the feed and a list of the ingredients of which the feed is composed. The law protects the consumer against misbranded, adulterated or short-weight feeds. It likewise protects the manufacturer of honest feeds against dishonest competitors. The feeder is thereby enabled to select the best feeds for his purpose by reading the label on the package.

Registrations when made are permanent, but can be changed, upon written request by the manufacturer.

The tax tag must be on every package of feed offered for sale, except wheat bran, shorts and middlings, rye bran, shorts and middlings, and buckwheat bran, shorts and middlings, manufactured in this state. It is a violation of the law if this tag is not properly attached to each sack of feed. These tax tags are printed in 25-pound, 50-pound, and 100-pound denominations and are furnished by the department at 10 cents per ton.



IOWA FEEDING STUFFS LAW

100 Pounds

R. G. Clark,

Commissioner

No. S417915

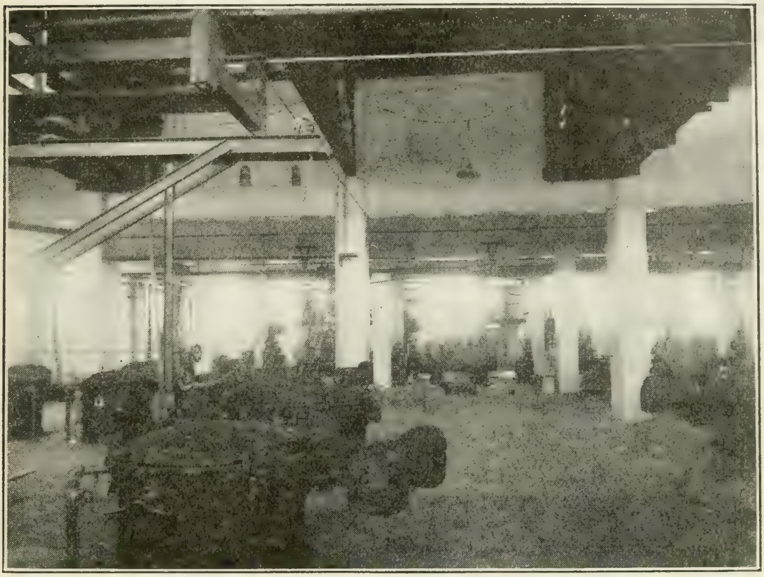
This is the Iowa official tag for a 100-pound package of feed.

Some manufacturers frequently do not attach the tax tag to each sack, but instead put the required number of tags in the car of feed, expecting the purchaser to place them on each sack. Often the dealer fails to do this and in some cases claims he saw no tags when he unloaded the car. The law requires the manufacturer to place these tags on each sack and he should not ask the dealer to do it for him, as the manufacturer is liable if the tags are not on each sack.

When the feeder has reason to doubt the correctness of the branding on the feed he buys he may take a fair sample of the feed and send to the Dairy and Food Commission with $1.00 and an analysis will be made for him. Samples should be taken from several sacks and mixed well together and a portion of this submitted for analysis. The department cannot make analyses for manufacturers. They should obtain this from their own chemist or a commercial chemist.

The law makes no provision for the payment of a refund by the manufacturer, to purchasers of feeds which have been found to contain a less amount of protein than is stated on the label. Where there is no apparent intention of the manufacturer to violate the law, we will calculate the amount of refund on the basis of the protein deficiency to be paid to the purchaser. If the purchaser is a dealer it is understood that he will make a proper refund to each of his customers to whom he has sold some of the feed found below the guarantee. Payment of the refund, however, will not restrict the department from taking such legal action as it may deem advisable.

The analyses of feeds collected by the inspectors and reported in the following table shows that the manufacturer is observing the law in all but a few cases. The greatest discrepancy is found in tankage. This is due no doubt to a failure of some manufacturers to have each lot of tankage analyzed before it leaves the factory. From samples of rendering house tankage submitted to the laboratory it is our opinion that very little of this product is suitable for feeding tankage. Much of it should be used for fertilizer.



Filling the Cans—An interesting part of the job of putting up Iowa's sweet corn crop.

INSECTICIDES AND FUNGICIDES

The law regulating the sale of insecticides and fungicides in Iowa became effective in 1917 and since that time fruit raising has become an industry of considerable proportions. The orchardist and the farmer with only a small orchard has found that without proper spraying of his fruit trees the crop is of little value.

The State Horticultural Association and the extension service of the state college has been instrumental in instructing fruit growers how to care for their trees and in the use of proper spraying materials. In order to determine the quality and the truthfulness of the labels on these products the department has analyzed a large number. Arsenicals must contain their arsenic in combined form and too much water soluble arsenic must be avoided, as it will affect the foliage. It is the chemical compounds of arsenic which adhere to the foliage and wood of the tree that destroys the insects and fungi.

There is very little discrepancy between the branded analysis and that found by the chemists of the department.

THE LABORATORY

There has been an increase in the number of samples which has passed through the laboratory and much information has been obtained as to the character of the different products covered by the law. Farmers have been making an increased use of the laboratory to check up the quality of the concentrates they feed and the stock remedies they use.

The purpose of the law is to give them this service for a nominal fee and we are glad to see them take advantage of it. Much of the time of the chemist has been consumed in analyzing samples for county attorneys and attending court.

The following table gives a list of the number of samples which have been analyzed in the laboratory:

Milk and Cream	1916	Samples
Ice Cream	105	Samples
Miscellaneous Foods	217	Samples
Paints and Oils	16	Samples
Butter	272	Samples
For County Attorneys	256	Samples
Seeds	98	Sampels
Stocks Food	38	Samples
Bacteriological	266	Samples
Total	3184	Samples

CITY MILK LICENSES

Table showing the number of milk licenses issued to city milk dealers for each year from 1912 to 1922. In each case the year ends on July 4th.

Year	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
No.	1,908	2,038	2,189	2,365	2,729	2,858	2,936	2,718	3,061	3,455	4,708

LOCAL STATE MILK INSPECTORS OF THE STATE OF IOWA

Cities	Inspectors
Boone	W. H. McLain, D. V. M.
Burlington	W. F. Schroeder
Cedar Rapids	Dr. A. R. Menary
Council Bluffs	B. A. Moore
Clinton	J. H. Spence
Davenport	A. B. Haskins, D. V. M.
Des Moines	W. B. Barney, Jr.
Dubuque	P. A. Hodge
Ft. Dodge	B. Gilleas
Ft. Madison	R. L. Casey
Iowa City	C. S. Chase, M. D.
Keokuk	Geo. B. Narrley
Marshalltown	Dr. R. M. Allen
Mason City	Dr. G. W. Cady
Muscatine	Dr. C. J. Hackett, D. V. S.
Ottumwa	Dr. E. F. Lowry
Sioux City	W. D. Hayes
Waterloo	C. L. McDermott

SUMMARY

During the year ending October 31, 1922, our inspectors have made a total of 46,047 inspections, as follows:

Grocery	11,276
Meat Market	5,258
Milk Wagon	223
Bakery	1,218
Slaughter House	257
Restaurant	365
Coal Dealer	113
Elevator	14
Feed Store	157
Ice Cream Factory	611
Creamery	1,184
Dairymen	480
Farm Dairy	683
Confectionery	732
Wholesale Grocer	15
Seed Dealer	40
Bottling Works	46
Cream Station	4,430
Produce	3,144
Wagon Scales	3,217
Counter Scales	9,626
Gasoline Pumps	1,682
Measures	950
Miscellaneous	326
TOTAL	46,047

DAIRY AND FOOD COMMISSION

Fees Received Year Ending October 31, 1922

Inspection Fee Tags	$20,216.20
Seed Analyses Fees	28.00
Feeding Stuffs Analyses Fees	77.00
Stock Food Licenses	2,350.00
Egg Dealers Licenses	7,361.00
Babcock Test Licenses	9,482.50
Scale Tag Licenses	6,204.00
Scale Inspection Fees	9,870.24
Sanitary Law Licenses	17,481.00
Milk Dealers Licenses	5,697.00
Gasoline Pump and Meter Licenses	14,061.00
Cold Storage Licenses	425.00
Butter Trade-mark Fees	90.00
Commercial Fertilizer Licenses	440.00
TOTAL	$93,764.94

Fees collected by this department, as listed above, are not used by the department, but are turned over to the state treasurer as soon as received.

CREAMERY STATISTICS OF IOWA

Showing Pounds of Milk and Cream Received, Pounds of Butter Made and Disposition of Same, So Far as Reported

COUNTY	No. of creameries reported	Pounds of milk received	Pounds of cream received	Pounds of butter manufactured	Pounds sold to patrons	Pounds sold in Iowa	Pounds sold outside of Iowa
Adair	2	44,221	979,011	378,111	27,194	79,938	261,524
Adams	1	....	200,000	63,000	2,300	23,000	37,700
Allamakee	7	....	5,802,636	1,903,375	59,917	138,939	1,311,307
Appanoose	2	191,518	74,253	31,459	527	24,121	2,611
Audubon	5	155,244	1,867,938	706,902	38,550	93,418	574,934
Benton	3	31,000	388,484	240,540	6,759	63,667	184,531
Black Hawk	10	7,666,596	4,872,089	2,282,667	90,997	1,277,564	897,498
Boone	2	....	163,262	179,890	7,347	120,411	52,122
Bremer	23	53,281,933	2,488,790	3,276,978	235,383	293,548	2,717,375
Buchanan	9	8,949,868	3,642,636	3,047,842	138,458	261,931	2,355,566
Buena Vista	3	1,123,534	1,063,598	352,912	14,048	73,345	188,419
Butler	11	10,896,205	10,187,244	1,862,963	88,974	226,891	1,516,889
Calhoun	4	82,950	645,827	418,641	12,859	117,487	271,258
Carroll	9	680,311	3,899,872	1,664,754	19,596	587,961	908,847
Cass	2	....	483,720	1,106,069	9,311	111,699	985,369
Cedar	6	....	3,669,455	1,399,557	58,061	252,120	930,788
Cerro Gordo	9	2,841,938	9,357,938	3,173,450	81,536	510,833	2,570,622
Cherokee	1	....	77,277	25,759	1,243	24,516	....
Chickasaw	9	4,120,991	5,714,337	2,132,642	166,114	66,978	1,792,822
Clarke	1	....	....	77,573	....	77,573	....
Clay	4	218,400	619,000	217,875	16,446	13,869	62,952
Clayton	16	16,606,628	9,595,316	3,702,788	158,156	396,086	3,147,786
Clinton	5	12,572	1,349,758	2,337,251	38,267	165,941	2,011,965
Crawford	1	....	....	907,028	4,562	30,901	871,604
Dallas	2	2,295,077	58,181	163,053	3,300	140,785	18,968
Delaware	12	6,111,047	6,353,078	2,475,294	173,413	211,545	2,038,804
Des Moines	2	....	810,370	446,812	664	446,148	....
Dickinson	3	....	1,956,956	842,856	34,649	123,306	684,901
Dubuque	15	8,498,049	9,067,125	5,759,770	105,951	1,237,074	3,891,834
Emmet	4	579,169	1,329,053	463,362	35,224	89,029	339,112
Fayette	15	29,580,234	7,302,628	3,633,563	225,316	346,058	2,975,563
Floyd	4	241,306	2,340,270	796,421	39,740	241,200	519,308
Franklin	5	27,865	2,361,839	686,803	47,127	38,111	601,956
Greene	1	36,780	176,822	67,209	256	66,953	....
Grundy	5	552,473	967,061	523,176	27,753	21,824	473,598
Guthrie	4	33,979	1,092,821	421,018	16,383	291,731	99,851
Hamilton	7	801,787	388,243	259,633	45,875	33,006	190,252
Hancock	6	36,951	3,968,792	1,284,544	57,156	139,852	1,087,528
Hardin	8	425,165	3,627,242	3,459,303	80,568	622,077	2,764,598
Henry	1	150,000	61,000	26,500	....	26,500	....
Howard	9	....	6,802,963	1,783,077	61,041	24,884	933,935

Humboldt	4	396,308	1,111,001	422,500	19,862	169,721	233,001
Iowa	4		402,972	167,923	5,140	100,858	61,925
Jackson	9	512,921	5,396,337	1,902,635	77,700	340,056	1,481,407
Jasper	1	447,200	373,120	136,600	325	57,237	79,038
Jefferson	1		246,940	91,460	3,433	60,167	27,850
Johnson	1		1,120,215	468,259		184,000	284,259
Jones	5	19,154	6,584,490	2,037,422	136,061	93,705	1,780,924
Keokuk	3		910,995	349,400		133,434	215,966
Kossuth	12	319,042	5,382,820	1,758,625	197,892	178,280	1,411,998
Lee	2		314,639	2,120,692		321,646	1,683,161
Linn	7		5,876,671	2,386,222	78,848	474,861	1,781,109
Lucas	1	103,508	4,010,118	35,198		35,198	
Lyon	3		165,630	430,454	1,565	4,335	319,868
Madison	1		99,648	40,523		40,523	
Mahaska	4	817,791	275,191	370,113	13,000	139,412	49,450
Marion	2	75,000	3,840	160,000		53,333	106,667
Marshall	4	363,439	2,276,138	976,530	40,138	204,223	621,357
Mills	2		122,586	194,308	3,000	10,000	100,000
Mitchell	7	22,563	5,480,879	1,615,678	150,637	66,553	1,408,488
Monroe	1	303,000	140,750	52,025	404	47,901	3,720
Montgomery	2	138,299	149,119	273,975		36,192	
Muscatine	1	39,922	684,035	204,536	12,539	114,799	77,198
O'Brien	3	207,686	2,238,339	804,927	56,651	179,622	568,728
Osceola	2	147,401	769,615	274,731	39,859	9,545	225,327
Page	1			1,128,817		67,077	1,031,704
Palo Alto	8	101,697	3,107,659	1,059,661	104,010	167,148	788,503
Pocahontas	3	7,800	767,329	291,389	5,700	67,329	140,103
Polk	4	1,345,716	49,945,359	5,504,851	184	2,865,417	2,784,024
Pottawattamie	1			1,338,850		316,480	1,022,370
Poweshiek	2	482,020	724,124	290,039	1,066	161,962	109,751
Sac	1	371,640	735,804	312,136			
Scott	3		4,506,590	1,728,231	786,754	762,878	468,959
Shelby	3	20	466,376	190,138	28,461	5,741	152,751
Sioux	9	696,855	7,118,898	2,879,473	167,222	448,004	2,244,229
Story	7	975,532	2,939,130	1,050,083	120,511	385,730	543,742
Tama	3	12,000	891,144	993,091	7,514	173,104	812,373
Taylor	1			142,614	11,138	30,797	100,679
Union	3		1,098,013	1,379,534	4,500	481,795	957,404
Wapello	3	298,502	8,025,916	3,159,900		342,016	2,813,084
Washington	2		167,950	87,543		80,818	6,720
Wayne	1		3,229,324	1,120,449	2,000	50,000	1,068,449
Webster	3		1,703,835	674,239	4,979	618,298	50,960
Winnebago	8	153,293	4,798,476	1,721,333	176,844	115,200	1,429,289
Winneshiek	10		10,821,607	2,385,528	60,631	213,756	2,100,228
Woodbury	3	4,699,816	54,930,688	22,607,108	15,000	1,168,725	21,614,697
Worth	9	55,580	4,416,800	1,493,961	111,313	62,895	1,133,021
Wright	4	95,856	2,404,278	771,965	39,259	226,107	505,599
Total	422	169,482,729	322,742,273	124,168,089	4,715,171	20,999,598	94,674,777

PART VII

Corn Belt Meat Producers' Association, Eighteenth Annual Meeting, and the Iowa Co-operative Live Stock Shippers

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WEDNESDAY, DECEMBER 20, 1922

President Sykes: Gentlemen of the Corn Belt Meat Producers' Association and the Iowa Federation of Co-operative Shippers, the time has arrived when we should now open our joint convention. The invocation will be offered by Dr. F. C. McKean, of the Central Presbyterian Church, of this city.

Dr. McKean: Almighty and Ever-Blessed God, Thou who art the Giver of all life and health, every good and perfect gift, with whom there is no variableness, neither shadow of turning, we approach Thy throne this day in prayer, thanking Thee for all Thy boundless mercies in our lives; for health and strength and every great good. We ask Thee, as we come here together as friends and as citizens of a great commonwealth, that Thy blessing may be upon us and upon it, and we may be true citizens of the great Kingdom of God, and be as loyal to Thee as to that nation. And we ask Thy blessing upon these men as they come here from the great agricultural districts of the state; bless them in the home life and families; bless them in the business outlook. Give them happiness and good cheer as we approach this glad Christmas-time, and may they not forget the great Source of such gladness, when He came to humanity, who was announced not as a great philosopher, not as a teacher merely, but,—"Unto you this day is born in the city of David, a Savior, who is Christ, the Lord."

Let Thy blessing be with us for all our deliberations; may these men enjoy every advantage of our city, and may we, as citizens, go on and strive through a lifetime of citizenship, for a grander civilization. We ask it all in His name, Amen.

ADDRESS OF PRESIDENT A. SYKES

We are now assembled in the nineteenth annual meeting of the Corn Belt Meat Producers Association, and the second joint annual gathering with the Iowa Federation of Co-operative Live Stock Shippers, and to all we extend a hearty welcome and express the desire that you will all take an active interest in discussing the many problems that confront the live stock industry, which in one way and another, will be brought out in this meeting, and in this way lend your aid and assistance in the building up of the greatest industry in the middle-west.

I am glad to be able to state to you in the opening of this address, as a sort of keynote or inspiration to you, that we have assembled under more favorable financial conditions than prevailed one year ago. While the farmers and stockmen have enjoyed better prices for their products during the past year than they did during the period of deflation, yet they are not by any stretch of the imagination out of the slough of despondency, and over the hill to prosperity. There are yet many important problems that must be tackled and solved before you can hope to again enjoy the prosperity to which you are so justly entitled.

The Corn Belt Meat Producers' Association, during the past year, has moved along in a sort of regular way, nothing of a spectacular nature having happened to place it especially in the limelight. At the same time, it has been one of the busiest years for your officers, in assisting to work out ways and means for relieving your financial distress and improving the general situation.

You will doubtless recall that at your last annual meeting, I went into at some length the various phases of our live stock rate case in which your organization was contending for a reduction in live stock rates to the various markets. Soon after the adjournment of our last annual meeting, an agreement or compromise was reached with the railroads, by which they agreed to reduce all live stock rates where the rate was 50 cents or less, 10 per cent, figuring on the basis of Iowa's annual freight bill on live stock. This 10 per cent reduction means a saving to Iowa live stock producers of over one million dollars annually, a snug little sum indeed, and your association is justly entitled to due credit for this saving to the live stock producers.

During the past year, your president, as your representative, has attended a number of important meetings and conferences, at which we have to the best of our ability endeavored to voice your sentiments and protect your interests.

The week of January 30, I attended the annual meeting of the American National Live Stock Association, at Colorado Springs, and as a member of the committee on resolutions, assisted in formulating the policies of the association for the coming year.

The week of January 25, your secretary, H. A. Wallace, Vice-President Gunn and myself attended the National Agricultural Conference at Washington, D. C., called by Secretary of Agriculture Wallace at the request of the President. This was the first conference of its kind ever called by a president of the United States to discuss and consider the needs of agriculture from a national standpoint, and to work out ways and means for the relief of the farmer. There were some five hundred delegates in attendance, 339 of whom were farmers and persons representing various farmers' and live stock organizations.

A tentative program was arranged for in advance of the meeting, and one delegate chosen from each section of the country, such as the corn belt, the cotton belt, the wheat belt, etc., to present to the conference conditions prevailing in his section of the country. It fell to the lot of your president to try to place before the conference the financial condition of the farmers in the corn belt, a synopsis of this address having been printed in the 1921 annual report of your organization. Each of your representatives was also placed on important committees and assisted in working out the general report of the conference.

It is difficult to estimate the value and importance of this conference to the cause of agriculture; but we are firmly convinced that through it the attention of the great financial interests of the country was called to our distressed condition in such an unmistakable way that they could not longer refuse to give aid and assistance for relief. It is noteworthy that improvement in agricultural conditions dates from about the time of the holding of this conference.

The week of February 12, in conjunction with representatives of the Military Tract Live Stock Shippers' Association, of Illinois, I attended a conference with officers of the Chicago Live Stock Exchange, in an effort to secure a reduction in commission charges; after laying the whole matter from the standpoint of the live stock producers before the commission men for their consideration, they decided not to make any reductions in their charges at that time, and up to the present, I am sorry to say, they have not changed their minds.

The week of March 10, I met in Chicago with the men selected by the various organizations for the National Live Stock and Meat Board, and assisted in setting up that organization. That, as you doubtless know, is an organization formed for the purpose of making meat more popular in the human dietary by properly placing its food value before the consuming public, and in this way increase its consumption and assist the live stock producer. Mr. R. M. Gunn, who represents your organization on this board, will speak to you later on the work of the board, so I will not encroach further upon his subject.

The week of March 16, I attended a hearing in Chicago before an examiner for the Interstate Commerce Commission, in which we were asking for a lower minimum weight on carloads of hogs shipped during the summer months. The American Farm Bureau Federation filed the original petition in this case, and your organization appeared as intervenors and furnished most of the witnesses. The case was tried out at some length, and the fact was fully established that lighter loading in hot weather is very necessary. Later on, the arguments were made by the different attorneys before the commission, but up to the present no decision has been rendered in the case.

Neither has the commission handed down as yet a decision in our Iowa case, which was tried out during the fall of 1921. In this case, you will recall that your association was asking that the 16,000-pound minimum be restored on hogs shipped to points within the state, the same as we enjoyed prior to the war. It is probable that these two cases may be merged by the commission and the decisions rendered at the same time.

The latter part of March, your president was chosen as a member of the board of directors of the Chicago Producers' Commission Association, and at the first meeting of the board, he was elected president and put in charge of the organization work at Chicago; and on the 19th day of June, the company opened for business, with S. W. Doty as manager, and began selling live stock under the co-operative marketing plan worked out by the Live Stock Marketing Committee of Fifteen, of which your humble servant was vice-chairman.

This company, as you doubtless know, is organized strictly on the co-operative basis. It charges the same commissions as do members of the Live Stock Exchange, and will refund annually to its shippers, who become members, its surplus earnings. In this way, it not only reduces the cost of selling your live stock, but it gives the live stock producers direct representation on the market and an interest in their own marketing agency, which under the old system is impossible.

The Chicago Producers' Commission Association has enjoyed substantial support from the first week that it opened for business; especially is this true of the Illinois shippers, and while Iowa has contributed a fair amount of business, yet, as compared with the percentage of live stock we ship to the Chicago market, we have been sadly lacking in furnishing our share of the business. For this reason, and in order that you may become more familiar with the men and the operations of your own commission association, Mr. Doty, the manager, will address you later, more specifically, on the work they are doing at Chicago, with the hope that it will greatly stimulate shipments from Iowa to the Producers' Company at Chicago.

Lower Commission Charges

Many of you doubtless know that the Corn Belt Meat Producers' Association, in conjunction with some of the other live stock organizations, is now engaged in an effort to secure a reduction in the present schedule of commission charges for selling live stock.

The latter part of October, we assisted in conducting the first hearing in the case which was held at Kansas City before Messrs. Dagger and Gore, representing the Packer and Stockyards Administration of the Department of Agriculture. This hearing was entirely informal; those representing the live stock shippers and those representing the commission men presenting their side of the case in a purely informal way. It is the desire of Messrs. Dagger and Gore, who will hear the case, to conduct similar hearings at each of the larger markets, and after this is done, and the evidence thoroly analyzed, they will endeavor to work out what seems to them to be a reasonable and just schedule of commission charges. If this course is pursued, the case will doubtless be long-drawn-out and no definite conclusions will be reached for some time in the future.

Now as we go through this report, if there are any of you who wish to ask questions, don't think it will embarrass me a particle. If I read on for some time, you may forget something that might flash through your mind, and if you want to inquire about anything, I will be glad to take it up just at the time.

Membership Campaign

During the fall, in connection with our other duties, we did some field work in securing renewals and new members for your association.

Mr. Goodenow, your treasurer, also assisted in this work, and you doubtless will be interested and encouraged to know that in spite of the very close money situation, farmers and stockmen still believe in the Corn Belt Meat Producers' Association, and stand ready to back it up with their financial and moral support, and our field work was very successful and satisfactory.

During the coming year, a very earnest and intensive campaign should be conducted to build up and increase the membership of your association; this can only be done through a diligent and systematic effort.

In this brief report, I have attempted to give you a little resume of the activities of your officers and the accomplishments of your association during the past year. So we will now turn to a forward look into the future, and call attention to some of the important problems confronting you, which I believe deserve your careful consideration in outlining your policies for the ensuing year.

Railroad Rates and the Transportation Act

The important question of rail transportation and freight rates is still with us, and should be given the most careful consideration by this convention.

Freight rates on live stock are now about 53 per cent above pre-war prices, while the price of ordinary live stock is less than 25 per cent higher than the pre-war prices. This shows conclusively that freight rates are entirely too high and out of line with the prices the live stock producer receives, and that the live stock business can not recover itself until a proper adjustment of freight rates has been made. Then, on the other hand, the price of live stock has been cut squarely in two from the peak prices following the close of the war, while the cost of transporting it to market has been reduced but 10 per cent here in Iowa. This condition places the stockmen and feeders at a very great disadvantage, and I believe that steps should be taken by your organization in the near future to secure a further reduction in freight rates, which is so vitally necessary to the upbuilding and future existence of the live stock industry.

The question of a three-quarter rate on feeder hogs shipped into the feed lots from the markets, the same as cattle and sheep enjoy, is becoming a very live question among hog feeders, and constant demands on us are being made by these men that your association make an effort to secure this concession in the rate on feeding hogs. Under these conditions, I believe we owe it to the industry to make a very careful survey of the movement of feeder hogs, and if it is found that a three-quarter rate is justifiable, an action should at once be started before the Interstate Commerce Commission to establish such a rate.

I would like to digress just a minute here in regard to this matter. This is a matter that has been up for several years. There has been quite a little controversy over it as to why feeder hogs should not enjoy the 75 per cent rate the same as feeder cattle and sheep.

The matter has been taken up informally with different members of the Interstate Commerce Commission, and the belief has been expressed on the part of these men that we have conferred with, that the volume of business would not justify a 75 per cent rate on feeder hogs. We have hesitated on that ground to file a formal complaint with the commission, asking that they establish a 75 per cent rate on feeder hogs. During the past year there has been quite a demand to do something along this line, and this has led me to refer to this question in my annual report. My thought is that this organization should make a careful survey and find out as nearly as we can, something in regard to the volume of business that is being handled in feeder hogs, and this would give your board and your executive committee some idea, that is, as to whether or not they would be justified in filing a formal complaint with the commission that such a rate be put in.

While I am on the subject of transportation, I wish to again call attention to the importance and necessity of congress amending the transportation act, known as the Esch-Cummins bill, and to emphasize what I said to you concerning this measure in my last annual address. Section 15-A, which requires the Interstate Commerce Commission to fix rates high enough so that the roads will earn 5½ per cent on their estimated valuation, which in a sense is nothing less than a guarantee, must be eliminated from this law and again allow the commission to fix rates on the basis of the value of the service rendered.

It has been truthfully said that the higher the rates the poorer the service, as under the present order of things there is no incentive whatever for the railroads to give the stockmen first-class service. Then, too, the act should be so amended as to restore to the state railroad commissions all of the powers which they possessed over rates and other matters of intra-state traffic prior to the taking over of the roads by the government in 1917.

Then there is a third amendment to this act that should be pushed and insisted upon by our organization, and that is either to do away entirely with the Rail Labor Board and again allow the carriers to deal directly with their employes, or else create a real labor board, whose members shall represent the public who pays the freight, who shall have full authority to determine and settle all questions of dispute between the railroads and their employes, and shall have full and unlimited authority to enforce its rulings upon carriers and employes alike.

As the board now functions, under the present law, it has virtually become a hissing and a by-word for both interests whom it attempts to regulate, as the recent railroad strike clearly demonstrated. So I am for either a real railroad labor board which represents the public, backed up by a real law that has teeth in it; or, we should again go back to the old order of things, and allow each road to fight it out with its own employes; and I hope that the Corn Belt Meat Producers' Association will get solidly behind this movement, and use its power and influence to secure the passage of these amendments before congress adjourns.

Damage Claims

In recent rulings of the Iowa courts, in cases of loss and damage claims against the carrier, for live stock killed or injured in transit, the burden of proof has been placed upon the shipper to show that the railroad was unduly careless and negligent in the handling of his live stock, before he can recover damages for stock killed or injured in transit.

This is the exact opposite of the custom followed in the past, as the burden of proof was always upon the carrier to show that it was not careless or negligent in the handling of the live stock in transit, and unless the carrier could prove this, it invariably lost the suit. But under this new order of things, it places the shipper at a very great disadvantage in collecting his damage claims. Especially is this true of the shipper who does not accompany his stock to market, as it would be very difficult for him to prove gross negligence in the handling of his stock while in transit. This, then, being true, your association should take immediate steps to have the laws properly clarified on this matter during the coming session of the state legislature.

I want to digress just a moment on this question. This situation was brought very forcibly to my attention during the summer. When some of our local lawyers there were trying out a case in our district court, the judge took the case from the jury before it was near through and instructed a decision for the carriers in the case, on the ground that the complainant in the case—the shippers—had not shown that the railroads were careless or negligent in the shipment. Of course you men know as well as I do, that for the man who does not accompany his stock, that is a physical impossibility. He doesn't know anything about how the railroad handles his stock, so that it would either force every man to accompany his stock and never go to sleep while he was on that trip, and be on the job every minute, or else he doesn't stand any show whatever, if he has dead or crippled animals in the shipment while in transit, in the securing or collecting of damage claims on those animals. I think there have been about three decisions rendered by our Iowa courts in cases of this kind, where they have practically held that it was up to the shipper to prove gross negligence on the part of the railroad in the handling of the stock, in order that they might secure damages, and for that reason, I might add, there is no question but what the railroads are being relieved of large numbers of claims; that they are refusing to pay them because they know the shipper won't sue on them, because the shipper knows he would stand a poor showing in an attempt to collect.

So it seems to me, in the present session of the legislature that this law should be clarified and see where we are at and see that a shipper will stand on an equal footing with the railroads in securing justice in the courts.

Taxes

The question of exorbitant taxes is still with us, and farmers everywhere are almost driven to acts of desperation to secure money with which to pay their taxes, and still the burden continues to increase. I went into this question at length in my last annual address, so I do not wish to repeat, but rather to emphasize what I said then, and I feel that a strong resolution should be adopted demanding retrenchment and reform in the spending of our public funds by our county, state and federal officials, and that this be followed up by your association joining forces with other farm organizations to bring about a more sane and equitable method of taxation, during the coming winter.

In this connection, I wish to call your attention to the importance of your organization taking a stand against the issuance of tax-free securities, and making a fight to have our state and federal laws amended so as to stop the issuance of all tax-free securities, as they are drying up the sources of taxation and annually increasing the burden of taxes upon the common people, while the rich go Scot-free. This is a most vital matter and should merit your most hearty support.

Ship Subsidy

We are again facing a demand that congress subsidize our merchant marine. Without going into either the merits or demerits of a subsidy, I will say I consider it a most dangerous precedent to establish. I believe we should face the matter squarely, and if we are true to the early traditions of this association, we will pass a strong resolution opposing the measure, and at once let the United States senate know where we stand on the question.

The Packer Merger

During the past sixty days, much has been published about the proposed packer merger, promulgated by J. Ogden Armour. We read much in the press about Mr. Armour soliciting the approval of the various "powers that be" at Washington for his merger, and just recently the Secretary of Agriculture gave out a statement to the effect that the government, under the Packers and Stockyards act, is not given power to prevent the merger, but neither approves nor disapproves of the consolidation.

Personally, I am opposed to the merger, and I find that this is true of stockmen generally, as the general feeling is that competition in the live stock markets at the present time is very mild, and that every big operator that quits the markets reduces the competition in buying, and places the market in the hands of fewer people, thus making it more difficult for the farmers to secure fair and equitable prices for their live stock.

My observation of mergers in the past has led me to the conclusion that they are not formed in the interest of the public, nor to benefit either the producer or consumer, and I believe the packer merger, if consummated, will be no exception to the rule. As I consider this of vital importance to the live stock producers of the country, I believe this convention should place itself on record in this matter.

Live Stock Statistics

The United States Department of Agriculture, through its live stock statistical department or bureau, has adopted a plan of taking the live stock census which, if the farmers will do their part and fill out the questionnaires sent them by the Department and return to the designated office, will become of great value to the stockmen of the country, as they will be able to get fairly reliable information as to the total number of feeding cattle and hogs on hand at certain times in the year.

Mr. C. L. Harlan, who is supervising this work, is with us and later will explain their method and plans to the convention.

Foreign Immigration and Farm Labor

The very acute condition that has prevailed during the past fall in regard to the shortage of common or unskilled labor, and especially farm labor, and the great difficulty farmers have had in securing sufficient help to harvest their crops, causes me to call your attention to the prohibitive restrictions that were attached to our immigration laws by the federal government following the signing of the armistice.

These restrictions no doubt were necessary at the time to protect the American laborer; but they have served their purpose and everything now indicates that the farmers are now facing a real labor shortage, which is going to seriously interfere with their operations and increase the cost of production. For this reason, I believe your association should here go on record urging the removal of the restrictions on foreign immigrants, and should join forces with other farm organizations who favor this movement to have the present congress take favorable action upon this matter. Unless the bars are lifted, and foreign laborers permitted to enter this country in much larger numbers, I believe the farmers of the middle west will be confronted with the greatest shortage of farm labor than they have yet experienced.

In conclusion, I will say that I have given you this little resume of some of the work accomplished the past year, and tried to call attention to some of the more important problems confronting you, with the hope that it may assist in outlining the work and policies of your association for the coming year and give you hope and encouragement for the future.

President Sykes: Now at this time I have the pleasure of introducing you to Mr. J. N. Horlacher, of Storm Lake, who is president of the Iowa Federated Co-operative Shippers' Association, who will address you. Mr. Horlacher.

Mr. J. N. Horlacher: Mr. Chairman and Members of the Corn Belt Meat Producers' Association and Iowa Co-operative Shippers. Two years ago, when we were organizing, we had about thirty members. With this organization, the state Farm Bureau helped us out and we had an office with them and the work was carried on practically under their supervision. Also the board of directors of the Shippers. That was a year ago and it was to be carried on until the first of January last, at which time the Shippers were to go alone. We have today about one hundred sixty-five or seventy members to this organization.

Our work, as most of you know, is to help out the shipping as-local buyer is all but killed out, and needs some assistance outside of what they have at home. That has been one of the activities of the Co-operative Shippers. Another activity we have been working at during the last year is opening up the smaller markets in the state. Iowa is peculiarly situated. We have about eight or ten markets that we ship to, and we have ten or a dozen within the state and right over the border of the state. And if a local buyer has a market within the state which is a better concentration point or a better market than the Chicago market or the Omaha market or Kansas City and St. Joe market, we have been trying to get the co-operative shipper—the majority of the Co-operative Shippers' Association, to have this market as well as the buyer.

Another problem we are working on is the claim problem, as Mr. Sykes has mentioned. We are trying to get help out there in railroad claims and to get better car service. We have been endeavoring to help out in that as best we can.

We don't want, as an association, to do work that some other association is doing or is trying to carry out. We don't want to overlap with the Meat Producers, or try to do their work. We want to try to co-operate with them, but it seemed at our meeting that there was some agency needed in the state to help build up and strengthen the weaker associations over the state; and until some other association takes this work up, we think it the duty of the Co-operative Shippers to do it. One deplorable fact that confronts us, is the lack of harmony among the different farm organizations. I believe we are spending too much time, thought and energy, in fighting other organizations rather than trying to co-operate with them; and if I have any message at all for you today, it is this—that we try to co-operate more with the other organizations and not try to do the work, or take it away from them. There is always plenty of work for all of us to do. I believe with our farmers, the greatest weakness is that we do not co-operate enough one with another.

President Sykes: I am going to introduce to you Mr. Knute Espe, secretary of the Co-operative Iowa Shippers, who will talk on the Co-operative Shippers' problems at this time.

CO-OPERATION IN SHIPPING

BY KNUTE ESPE

I have no startling things to tell you, and perhaps can not tell you a lot of things that you don't already know—most of you. I will probably tell you some things that you do know, you co-operative shippers, at least, yet they are things that I think we need to be told about every once in a while. It is just like the sermons on Sunday morning. Lots of things we already know, but still they need to be told to us about once a week, and lots of them ought to be told to us about every morning. You may not like to hear these things, but I will have to tell you.

Some of you may not like the things I have to say, but I hope you will do like I usually do when I am told things that I do not like, I always reserve the right to my own interpretation of it, and I usually interpret it favorably to myself; so it's all right.

Now we have in Iowa somewhere around six hundred and fifty shipping associations, more or less—nobody knows exactly how many; but there is one thing that is startling to me, and it is information that sometimes I don't like to scatter around either; I think we have got less shipping associations now than we had a year ago or two years ago. Here is another startling thing: We are shipping less cars per association today than we were a year ago or two years ago. That is information that it is well worth thinking about. What is the reason for that? Well, there are a lot of answers to that question. In the first place, co-operative shipping is young. We haven't had it with us very long. It is a sort of overgrown individual. In 1920, over three hundred shipping associations were organized alone in that year. Probably half of the shipping associations we have today were organized in 1920, and then quite a large bunch of them in 1921, and a good-sized bunch in 1918. They have not had a great amount of experience. We haven't a very long past to look back to and profit from. And then there is another factor: These shipping organizations have been organized by every Tom, Dick and Harry all over this state. They have been organized by the extension department of the college, by county agents, by the Farmers' Union, and by the Grange, and some of them have just been organized by different farmers' clubs, and some of them just grew, you know, like Topsy did, only not on a corn stalk. Then a lot of them have been organized by independent old line commission men, who usually had only this one thought in mind, that we want to organize a gang here in this state that will ship us some live stock. In practically every case, no matter who organized them (I have organized a lot of them myself), in practically every case, the shipping association has been organized, and then we have run off and left it out on an island, to either sink or swim by its own efforts. The extension department, it is true, has been doing considerable work, but it has only been in the past year or so that they really did the greatest amount of work. But they are handicapped. They couldn't do a lot of these things that need to be done in a commercial way. It was not until several years ago, as Mr. Horlacher told you, some shippers got together and saw there was a need for some organization, state-wide in character, a commercial organization, to get together and try to straighten out the tangle we are in in co-operative shipping. As a result of that, we have been organized by every Tom, Dick and Harry. There is not much said in the constitution and by-laws. We have by-laws of all kinds and colors. Lots of associations don't have them, and at that I sometimes think they are a lot better off than many of those that do have, because they would be better off without some of them. We haven't given much thought to the matter of economy, or efficiency, or anything of the kind. We have just wanted to get together and ship live stock. That is all. And the thought that has been foremost is making up a car and shipping it out somewhere. They hadn't thought much about what we need back home in order to keep it going efficiently.

I read a little story in a magazine the other day. It went on to tell about football—the game of football. Of course we all understand that it is a pretty rough-and-tumble game, and back at Harvard it was especially tough. One of their prominent football men down at Harvard, during the summer vacation, went out west to work on a ranch. He got some of the ranchers interested in football, and they thought it would be nice to have some football out there amongst the cowboys. So they got the boys organized into a couple of football teams. He got busy and picked up enough men for two teams, of the finest looking cowpunchers, and then he explained to them, he says: "Now, if you can not kick the football, kick an opponent." And so they started in, and finally the coach wanted to know, "Where is the football?" And one cow-puncher says: "To h—l with the football; let's go on with the game."

Now that just reminds me of a lot of those co-operative shippers. Let's go on and get this car out, and so on. We haven't paid much attention to the form of our organization—haven't made it permanent or stable. We haven't paid much attention to this matter of a manager. Why, 'most any kind of a fellow would be a good man to manage a shipping association. About the only thing required is the time to fiddle with it; that is all. Because all you fellows are supposed to do is to call him when you want to ship, and when enough fellows do that, he will order a car and let it go out. Naturally, that handicaps us. Of course, we haven't got enough business to begin with, to make it worth while for a good man to be manager, and naturally it has been a sideline, and a lot of these ex-managers would take what they can get. He would not be very aggressive for the rest of it, if he were to handle it as a sideline. Then we have boards of directors, too, and I can criticize a good many boards of directors who haven't taken the interest in the thing that they should. We haven't checked up the manager; we don't know what he is doing. It is his association, and sometimes you know the board of directors have complained to me, when I am out trying to help them solve some of their problems: "Why, we can not get our manager to do this. He doesn't want to do it that way." Well, maybe the manager is right. Undoubtedly he is, lots of times; but if he is wrong, certainly it is the duty of the board to have him do it the way they want it done. Managers are not to blame always. The blame rests on both sides. We haven't studied our business. We haven't had good managers, and there is no business on earth that will live without a good manager. Then, too, we have had the other problem that we haven't paid much attention to. That is the membership problem. We must have members. Then there is the matter of loyalty. You could take either one of these points and you could talk for three hours on it and bring out a lot of good points. We have seen members who are loyal to an organization that in many cases is not really worth being loyal to. You know it, and I don't need to go into details. I am just hitting the high spots, and leave it with you. As I travel over this state and see how lots of this business is conducted and the way the association is organized, I have had a faint suspicion for some time that the farmer hasn't had much to stick to, and it has only been just lately that we are getting squared around so that we can build an organization that is worth sticking to. As Mr. Horlacher told you, that is what the state association is doing, and they are mighty busy at it, too. It has been a free for all affair, all the way through. Voluntary entirely on the part of the member and manager and directors—the whole shebang—and it has gotten just about that much co-operation out of it, too.

Now I don't think at all that any farmer should stick to an organization if that organization is not able to deliver the service. I think first of all it must do that. You can not expect a man to be loyal if he does not get service. There is no place for our co-operative associations if they don't do that—until you get as good service or better than you can get elsewhere. And it is entirely possible to do that, too, if we will only organize properly, and I say that when we organize we ought to organize properly. First of all, we must have the volume of business that we know is going to go through that association during the next year. And then we can afford to be loyal. We can afford to hire a man as manager who knows, as we have in a lot of cases over Iowa—a business man, a man who knows live stock and knows people, and can get out and fight for his association and get business. We need directors of the same type. And then back of that, we need farmers who are willing to put their stock through that kind of a shipping association.

Now some people claim that I am a crank on this membership proposition. I think that is the highest compliment you can pay me in this shipping business. And yet I don't think I am a crank on it. I think that it is only good business on the part of the association and the farmer, too—the member, that when he joins one of these marketing sources, the association have something more than merely that man's word for it that he is going to put his stuff through. I say let him sign on the dotted line, along with all the rest of his neighbors, that he will put his stuff through and be loyal, and then if we will all do that, we are going to get somewhere. I want to qualify that statement a little bit. I don't think it is necessary at all at this time that every shipping association should sign its members on a membership, because if you are getting all the business that you can handle, and have your local problems pretty well solved, I believe in letting well enough alone for the time being. Don't think it is a routine matter, but these associations that are not getting the business—that are fighting as best they can the keen competition they are up against. When a stock buyer has the market, the local market, and the shipping association has to go to Chicago and take the shrink and the loss that the other fellow doesn't have, and he sells over the phone and a lot of things like that, it is certainly hard to overcome that. You can not live unless you have the vitality. And we have got to get the business for that association out there before it can get this vitality, and then you can get it. There will be plenty of illustrations of that brought out in tomorrow's meeting. It is hard to get that, if you don't have a definite volume of business.

I may state in the first place, in a general sort of way, that about one-third of our shipping associations order and ship, oh, around a hundred cars and better a year—the bulk of the business. And then there is roughly another third of our shipping associations that don't ship over forty, fifty to ninety cars—right around half of the business that goes out of town, some less than half and some more than half. And then there is another third that ship from nothing to twenty, thirty or forty cars a year. Any association that is not shipping more than that, can not deliver service; can not have a manager; can not get the markets that will handle the stuff, and they won't have a board of directors and its members can not be very loyal. We have got to put the business into our shipping associations. From a business point of view these markets differ. You can not ship to the same market all the time. You have got to ship once a week in order to give service to the farmer; you have got to get it out when ready to let go. You can not afford to hold it. We have got to watch these things and work from the best angle.

Just like the little Jew boy, when the teacher announced that she would give a dollar to the pupil that would tell her who the greatest man in the world was. And so she began calling on them, and one pupil said it was George Washington. She said, "Well, that is coming pretty close; George Washington was a very great man." Another little fellow said, Abraham Lincoln, and he was pretty nearly right, and so on down the line, and finally a little Jew kid, sitting in the back seat, said, "I know who the greatest man in the world is." And she asked him who it was. He said it was Jesus Christ, and she said, "That's right, he was the greatest man in all the world." And then after school was over, she got the little Jew boy up in front, and she said: "Ikey, I can not figure how you, being a Jew, would admit that Jesus Christ was the greatest man in the world." "Oh, well," he says, "I knew all the time that Moses was the greatest man in the vorld, but bizness is bizness."

The point I am trying to bring out, folks, is this, that our shipping associations are not organized right in most cases, and that you are going to have to go back over the field and reorganize. Now that we have an organization whose particular business it is to do that very thing, we have made some rapid strides in that work. We have got straightened out; we have them interested in it; we have verified this membership agreement. It is a fair one for anybody; there is no reason why any should not sign it, and most of them will sign it if you go out and ask them to sign it. That is the biggest trouble. We are following that up afterward by getting the business for the association, and then when we get an outlet, so that we can get the price, we talk managers and the rest. And the result of that is we have put lots of shipping associations on the map today that were not shipping any live stock and haven't for the last year or the last two years, and today they are shipping regularly. I can give you any amount of illustrations. We have men right in this crowd who represent shipping associations that have two hundred men—farmers—signed on this membership agreement right back of their shipping association. Right down here at Marion, Iowa, they had been going for over a year. I organized them three years ago; today they have got considerably over two hundred. They are shipping live stock to Ottumwa and back, and when they were asked to send us this stuff, "Why," they said, "you can not get it; you can not put in a shipping association there, because the stock buyer has the Ottumwa market—we can not get it."

The manager says, "I will ship my first car there." Now we have two hundred members, and we are shipping there. We have got the same kind of a deal up at Clear Lake, just eight or nine miles away from a big packing plant, that had one of the strongest buyers located at Clear Lake. Today they have two hundred fellows signed up, shipping seventeen cars in exactly thirty days' time. The manager says he is shipping twenty-six cars in less than two months. There are a good many men here who could tell you the same thing. I am just telling you that much to show you that this job can be done. We have got a lot of good shipping associations; we have got a lot of good managers; we have got a lot of good boards of directors—good work, but they are in the minority—that's the thing I want to bring out, and these other points really go to the founding and reorganization of them. If we don't do that, they won't be shipping much. But we want to do just what I said and believe, and if we don't do that, men, then this co-operative shipping business will not live long. We will never get any farther than we are right now. The little shipping association out in the country is the absolute foundation to all the market work that will ever go on further down the line. We can not get away from that. If we don't build the foundation well, we can not expect the shipping firms in their work that is being done, to get anywhere. I think there is one thing we have been carrying in mind a little too strong—maybe not too strong, but at least overshadowing the other thing. We have been talking big propositions—the thing away down yonder that needs to be settled and taken care of. And that is all right. That ought to be done; but while we have been doing that, we have overshadowed the thought and idea that there are a lot of things back home that need to be taken care of, or else the solution of other things will never be possible. That is the way I look at this thing. We have got those things to take care of, and let's clean our own houses first—each of them, and then perhaps we will get somewhere.

Now, one of the biggest pieces of work we have done in the state organization has been the thing Mr. Horlacher alluded to—get into the local markets. We have got about twenty of them in Iowa, or right across the border. Packing plants and concentration points would not any one of them handle any business as a shipping association, but hunt up the stock buyer and do business with him and refuse to do business with us. In northern Iowa, that condition was very acute. We felt this thing would work out, if the farmer was willing to do his share. We got the producers' contract and we got this stuff going out. You know that when you were a kid in school and you got into a fight with one of the other fellows—which we frequently did; you know that if he pounded with both fists and hit all over the body he didn't bother you very much; but the minute he began sending his fists on your nose, it began to have a telling effect. We began to figure that perhaps that was equally true of an organization.

We took the territory up around Mason City and Waterloo and Albert Lea and Fort Dodge, and we started in—not to tell you details, because I don't want to take the time—and we started to put one shipping association on contract. They were all Irish, too, every one of them. And then we went from that to another town right in the same community, and we got an outlet for that bunch of Irishmen—got a local outlet, that paid just as good as the other fellow had been paying the stock buyer. And then we got another town, and then got one county, and then we kept right on getting more of them until finally we got so many of them that there was a sort of a packing plant up there began to wire in and wanted to know where all the hogs were going to—he wasn't getting them. And we got enough of them so that he had to buy hogs elsewhere, and today that shipping association is going good. We are giving the same prices and service, absolutely, that the stock buyer used to give, and we have checked up on our records and they are getting stronger all the time. That is a big piece of work, men. We can not get anywhere unless we do get the market. I have seen the thing tried out, time and time again, and usually the stock buyer has the local market, and the shipping association has got to go to Chicago, and the stock buyer will equal them. Usually that is the case, not always. We have been opening up that market, and when we open that up, we will open three or four more right in the same neck of the woods. We are now getting in, as I told you in the first place, down at Ottumwa. The other day I got two shipping associations in Cedar Rapids. You can all have the market if you get the volume of business back home first. That is all. Those fellows want the stuff, and they are willing to pay for it, if you have got the stuff to sell. If you haven't got the stuff to sell, they are going to buy from the fellow who has it. It is up to us to get out and get the business, and it is no piker's job. Fellows tell me, "You get me the market, and then I will build a shipping association." I am forced to state, "Let us so build our shipping association that the packers will give us the market."

There are a lot of just such things I would like to talk to you about. I would like to tell you more of the state organization, but I don't feel like taking more time. I believe I have just said enough, so that you all have an inkling of what the situation is in the field. The remedy is reorganization under that plan; and then after we have done enough of it so that we can say that the plan is possible, it is workable. We have over one hundred and fifty shipping associations under this plan. Not all of them have been successful, because no matter how many meetings we have to get the farmers in and get them to sign, you are nearly always going to have the same bunch of men back every time, and the only way you are ever going to get the other fellow is to drive right out to his farm and get him out back of the barn or woodshed and sit down and talk this thing clear through from beginning to end, so he will understand the whole proposition, and then ask him to sign. And, do you know, in ninety per cent of the cases, they sign. That is one of the things I have learned in traveling around to these places. When we come to town we meet some of the directors and managers and they will sit down and tell us their problems—here is this, that and something else, and so forth; and then we tell them how we think they can handle that, and they will scratch their heads and say, "That is all right, that is a good plan, we ought to have it here, goodness knows, and it will solve the thing. We need it, but, you know, our problems are just a little bit different from any other shipping association, because we have—well, we are just a little bit peculiar around here." But in spite of that, these farmers come to the meeting, and where they understand it they will sign up. Now, men, that is the trouble, they don't understand. After they understand it, they do vote for it and they do sign it, and you can easily get eighty-five to ninety-five per cent of the men there to sign those things—and that is the way to build an association.

Of course, there are a lot of things that I can not mention here, that I would like to talk to you about. I will say this, I have written an annual report, but I didn't want to read it. I was so tired of it when I got through writing it that I didn't want to read it. I have got a lot of them; you can have one and read it yourself.

We have got these shipping associations, and they are not doing as well as they should. Not as well as they did in the past. But that is no disgrace—not at all! It is just because we are not organized right. We do need to go out and do this local work. That is the thing I want to leave with you. It is the little shipping association out in the country that needs help, and that is what I am pleading for. We ought to help them, or we will never get anywhere.

There is one point I want to make clear, too, before I sit down. We have got to meet this local stock buyer in his town on equal terms. And if that little concentration point market has got our Chicago market beat, at certain times of the year, that market is going to be available. And then I think that as we go on down the line incorporating that we are going to continue to find these concentration points, and I think that we should operate them ourselves and that will be easily done after we get the business into the hands of the shipping associations.

President Sykes: Now some announcements and then we will adjourn until 1:30. The first announcement is a committee on resolutions of the Corn Belt Meat Producers' Association. The Co-operative Shippers will announce their committee on resolutions after we re-convene after lunch. They are not prepared to announce them at this time. W. P. Dawson, chairman, of Cherokee county; R. M. Gunn, Blackhawk; J. A. White, Iowa; D. W. Crowfoot, Marshall; T. J. Robinson, Franklin; L. V. Carter, Hardin; T. D. Rittgers, Dallas; Charles Cessna, Poweshiek; H. S. Martin, Jasper; Harry Fox, Sac; J. S. Wheeler, Boone county. This is the committee on resolutions for the Corn Belt Meat Producers' Association.

Mr. Cotterell: I would make a motion that the two committees get together and compare their resolutions before reporting, otherwise there might be a conflict of resolutions between the two.

President Sykes: I think that is a good suggestion, and without putting it to the house, I will pass on that and ask the two committees to do that. I think that is a splendid idea. We will leave that then entirely with the committees after they are appointed. They can work that out.

We are now adjourned until 1:30 p. m., sharp.

Afternoon Session

The President: Now, gentlemen, if you will please come to order, we will open our afternoon session.

Now we have with us a man that the most of you have met, if not all. If you haven't, you have read about him—a man that has been connected with our college for a great many years, has been one of the foremost leaders in the live stock industry of the state, a man to whom we all love to listen and to associate with; and at this time I am going to introduce to you Dean C. F. Curtiss, dean of our State Agricultural College, who will address you at this time on "What the Iowa State College Is Doing for the Live Stock Man."

WHAT THE IOWA STATE COLLEGE IS DOING FOR THE LIVE STOCK MAN

BY DEAN C. F. CURTISS

Mr. President and Gentlemen: I am pleased to be with you for a short time to discuss some of the problems of general interest in which you are engaged and of vital concern to agriculture and the industries of Iowa. The topic assigned me is the one which the president has just announced, and we have constantly in mind problems pertaining to Iowa's live stock interests and agricultural interests, and everything connected with agriculture, in fact, and are endeavoring to work with you in cooperation with you and to help you in some of the problems that bear directly upon your work. In enumerating these, I will not attempt to cover all of them, but I will touch upon some of the more outstanding lines in which investigations have been conducted.

In the matter of gathering or harvesting the corn crops and converting it into meat products, during the past year about seven per cent of the corn crop of Iowa, or approximately 721,000 acres, has been hogged down, as we call it—it has been gathered in the field by the hogs. Now, on the basis of five cents per bushel, which is probably less than the cost when you consider everything, that has resulted in a saving of $1,600,000 in the expense of harvesting the corn crop alone. Now the experiment station at Ames does not claim the credit for all of this, because this is an old practice. It was practiced years ago when corn was much cheaper than it has been recently and when it was thought that it did not matter if they did waste some corn—that they could afford to gather it that way. And then the practice almost entirely went out of use until here recently during times of high-priced labor, owing largely to the result of work conducted by the experiment station in calling attention to it again, it has come in and is increasing each year. And it promises to be of especial importance during the years to come on account of the increasing price of farm labor.

We do not know, of course, at this time, but it seems altogether probable that it will cost the farmers of Iowa 15 or 20 per cent more to produce next year's crop, and to gather and market those crops, than it has cost this year. That is quite probable in view of the general demand for labor in the industries and the prevailing high prices that are being paid, and the shortage of labor that is existing on the farms today and probably will continue during another year. So it becomes of increasing importance under conditions of this kind to find means of doing the work at less expense, and hogging down corn is one of the ways of doing this successfully and profitably.

Then in the matter of preparing plans for hog houses, we have furnished and sent out to the farmers of the state over 15,000 hog house plans, besides a number for smaller movable houses and self-feeders. It would be difficult to estimate, perhaps, what that amounts to, but the better housing and the better care of the hogs on the farms undoubtedly is one of the important factors in successful pork production. On the basis of value of $5 for the plans and the saving of $5 profit—a profit of $5 in better houses over those of inferior type—this would run to a matter of a couple of hundred thousand dollars easily.

Some of the most important work that we have done has a direct connection with the work of cattle feeding in which you are engaged, and among other lines is that of determining the so-called standard ration, or as nearly as may be a standard ration for the corn belt region. And that ration is found to be mainly shelled corn and clover or alfalfa hay, supplemented by cottonseed oil or linseed oil meal. While we have done a good deal along that line in recent years, and have published and given out to this association and otherwise the results, we have this year in progress work that I think is of special interest bearing upon that subject.

We have ten lots of two-year-old steers weighing 1,050 pounds, that are being put on feed this week, that were purchased in Omaha at a cost of $7 per hundred, and have been carried on blue grass pasture for about thirty days, and they are going onto feed on the following rations:

Lot 1—Shelled corn, corn silage and clover hay.

Lot 2—Same as Lot 1, with the addition of one and one-half pounds of linseed oil meal per steer per day.

Lot 3—Same as Lot 1, except that they have three pounds of linseed oil meal instead of one and one-half pounds.

Lot 4—The same ration except that they will have one and one-half pounds of cottonseed oil meal in place of or in comparison with the one and one-half pounds of oil meal.

Lot 5—The same, except three pounds of cottonseed oil meal in comparison with the three pounds of linseed oil meal.

Lot 6—Shelled corn and clover hay alone.

Lot 7—The same at Lot 6, with one and one-half pounds of linseed oil meal.

Lot 8—The same at Lot 6, with three pounds of linseed oil meal.

Lot 9—The same as Lot 6, with one and one-half pounds of cottonseed meal.

Lot 10—The same as Lot 6, with three pounds of cottonseed meal.

So that this is a study of a variation of the so-called standard ration, shelled corn being the base in every case, and then a study of the supplementary feeds of cottonseed oil meal and linseed oil meal, and the clover hay and the silage. Now these are the rations that Iowa feeders have generally used. They are the standard rations of the corn belt, and while we have done work in that line, we haven't before used as many lots of steers as these, and we have not made the experiment quite as wide in its scope as this. With the co-operation of this association and your president, Mr. Sykes, helping to select the steers, that are high-grade Hereford steers, put in at the cost I named and with the initial weight which I mentioned, we are expecting to get some results that will be highly interesting, and we hope that they will be useful and valuable to the feeders of Iowa.

Then there are some other problems that we have taken up in connection with cattle feeding. There is a good deal of money paid out every year for the various kinds of commercial foods that are used to supplement corn, and we have tested out those foods in previous years quite thoroughly and with interesting results. In the years 1918 and 1919, on an average of two years' work, we found that we had $17.50 per head more profit from the standard ration of corn and the clover hay and the silage, supplemented by the standard supplement products, cottonseed meal and linseed oil meal, than we had from using the commercial supplement products that were used in this test, namely, alfalfa and molasses meals. We are growing alfalfa on the farms of Iowa to an increasing extent each year, and clover hay has always been grown to a greater or less extent; and we find that the supplements of the more concentrated kinds in combination with the foodstuffs of the farm have given better results and a wider margin of profit shown in these two years than by using the supplements that come largely in the form of ground alfalfa and the molasses feeds.

It does not follow that those commercial foods can not be used profitably under any conditions. I don't wish to be understood as making that assertion, but I am giving you results of the tests that we have made along this line, and probably this alone, if kept in mind by the feeders, would result in the saving of millions of dollars or adding millions of dollars of profit annually to the feeding.

And then a good deal of attention has been attracted by the advertising of molasses foods and the recommendation of molasses foods in recent years. We have been testing out molasses as a supplement to corn in the feeding lots of the state, and while molasses food has undoubted value it has not given results to indicate that it has appreciably any more worth per pound than corn, and the prevailing market price is a good deal higher than corn. The conclusion is that unless it can be bought at about the price of corn, it will not be profitable to use very much of it in commercial cattle feeding.

We have found, too, that the increased use of clover and alfalfa and of soy beans, where the beans are grown on the farm and the entire plant fed, will reduce the necessity of a large outlay for the supplements to the corn ration such as cottonseed meal and oil meal, and that they constitute a cheaper form of material for supplementing the corn ration than these other foods. In that connection I think we need to keep in mind the advantages of the farm products, of growing more of the leguminous crops on the farm. In the first place, they furnish a cheaper substitute or supplement for the corn than buying the alfalfa that is grown outside and ground and treated and sold as a commercial foodstuff, and they are grown at home and on the farm, and we save the expense of shipping under the high transportation rates, and they increase the returns that are obtained from feeding the corn crop out on the farm.

Not only that, but it gives a better system of rotation in our farming operations and better means of maintaining fertility. In order to get the best results from our farming lands, we need to rotate our crops, and we ought to have all parts of the farm in clover once in four years. We should get onto a system of rotation on our farms and seeding clover with the small grain that will put all the land of the farm into clover or alfalfa once in four years, and feed the grain grown on the farm to live stock fattened on the farm and put the manure back on the farm. When you do that, you need not worry about diminishing soil fertility.

But the man who grows grain and hauls that grain off and sells it, has to face the important problem of declining production and diminishing fertility of his land; and that is more important in these days than it has ever been before. I think we can well afford to keep this factor in mind in our feeding operations on the farm, growing more of the clover and alfalfa, and we will have the feed that is best suited to combine with the corn and produce economical results, thereby reducing the outlay of cash expended for cottonseed meal and for oil meal. And probably we can also increase the soy beans grown upon the farm, to be used in a similar way. I will give you some results later in the use of soy beans in feeding to hogs, that indicate that this is a means of saving a good deal of money paid out for supplements to the corn in feeding swine, and while we have not the same tests to any considerable extent in feeding cattle, it is probable that it will also hold true there, because the soy bean does furnish the protein, an element that we get in the cottonseed meal and the linseed meal in supplementing the corn ration.

Then the question of limited grain rations in fattening steers is an important question, particularly at times when corn and other grains are high in price, and the feeders have found corn at a constant increase just now. The probability is we will see corn 10 or 15 cents a bushel higher before we raise another crop than it is today, and it may be even more than that. And while that is helpful to the general situation of agriculture, perhaps, it is not helpful to the feeder that has to buy that corn and feed it to cattle. At times when there is relatively a narrow margin between well-finished cattle and cattle that are moderately finished, it is important to make just as much saving in the grain ration as we can possibly make on a sound basis, and that is especially true if we have high-priced grain.

That is not the situation just now. There has been a wide margin between the highly finished cattle and the moderately finished cattle, but that changes. There are times when there is a very low margin. When the conditions are that the margin is only about a dollar a hundred, it has been found decidedly advantageous to use a limited grain ration, and that we have found to be used successfully with either silage or corn fodder. And in using the limited grain ration very much cheaper gains have been made and a very much lower total feeding cost has been attained and many times cattle have been fed out under those conditions where there was a good deal more profit than the longer feeding period with the expensive corn ration running up into a large outlay for feeds.

The work that the experiment station at Ames has conducted along that line has pointed the way to finish cattle when the conditions are such as I have outlined and put them on the market at a good deal larger profit than can be done by the longer and more expensive grain feeding. Now, of course, there are times such as we have had during the past summer, with relatively cheap feed and with a shortage of well-finished cattle going onto the market, and the high premium paid on the market for the finished steers, that probably would not apply. But it is well to know what results can be obtained and apply the practice and make use of it when the conditions are such as to warrant the feeder in doing that. Under some conditions millions of dollars can be saved to the state every winter by the limited grain ration and the shorter feeding period.

Then we have done some feeding with lambs. Lamb feeders have had a good year's income. Lamb feeding has been profitable during the past year. There are a large number coming into the state every year to be fed out, and it is of interest to know what rations will give the best results. In the western region, in Colorado, for instance, they do not have corn. They would be glad if they did have it, and while they ship some in, it is expensive for them and they use other rations to a considerable extent. In the corn belt, however, our feeding experiments have shown that the most economical and the most practical and profitable ration for fattening lambs is with grain as a basal ration, and there is where the alfalfa and the clover as a system of farm rotation would come in with very good advantage, because there is no place where you can use alfalfa and clover hay to as good advantage as in feeding lambs. We have found the most economical and profitable results in using corn as a basal ration; much better than a ration made up with a share of oats or barley as the principal factor. While they have used oats and barley to a considerable extent in other regions, it is because they did not have the corn. It is fortunate, too, that this is the case, because corn is always our cheapest grain feed here. When we can get our best returns from the corn, combined with a supplement in the form of alfalfa and clover, and with a very limited amount of the other foods in connection with the corn, and when we certainly look for our best crops in that way, men don't need to consider very much outlay if they have plenty of clover and alfalfa hay. You don't need to consider very much outlay in supplementing the corn ration for lamb feeding.

Then, likewise, in studying the rations for pork production, we have found that meat products and milk give decidedly better and more economic results in combination with corn than any other form of the protein rations such as we have in linseed oil meal or cottonseed meal, than any other forms of commercial food, for instance. Consequently, we can look for our best gains, for our most economical gains and our largest profits in supplementing corn for feeding swine by the use of meat products, such as tankage, and the milk, either the milk products that may be found upon the farms where they are available or in the condensed milk products, if you wish to purchase them in that form. And as the result, I think, of the investigations and with the experience of practical feeders, the ration that is most used in fattening swine is the ration of corn and the meat products that we get in the form of tankage. But it is also of interest to know that we can grow something on the farm that will very largely take the place of the milk and meat products.

The growing and feeding of soy beans have indicated that soy beans have an average value of 80 per cent of the value of tankage, and if they are grown on the farm they can even be produced there for a lower cost, everything considered, than the purchase of the tankage. That is particularly true when tankage is so high in price as it has been during some of the previous years. And if that is certified by further investigation and by practice, I believe we will considerably increase our acreage of soy beans in the years to come as a means of supplementing corn and as a means of growing on the farm the supplement that is needed to combine with the corn in order to get the most profitable returns in swine feeding. Perhaps that will be extended to include cattle feeding and sheep feeding as well, to some extent. It may not give as good results altogether in feeding cattle as it has in feeding swine, but the chances are that it can be used to a considerable extent for that, and I am quite sure that it will be found to be a favorable feed for fattening lambs.

Then another means of supplementing the corn fed on the farm for swine is by the more extensive use of forage crops. It is exceedingly interesting to find the results that can be obtained in fattening swine by the use of good forage during certain seasons of the year. We know blue grass in the best condition furnishes about as good forage as we can get for swine, but that is a comparatively short period when the blue grass is succulent and fresh and in its most favorable condition for feeding. It does not extend, however, through the dry, hot summer months, and by making use of alfalfa and clover or of rape, we can get a summer feed that will give a forage crop for swine through the midsummer months and extending into the fall and autumn months, that will effect a very large saving of the outlay for grain at that time. I think we have come to a better realization of this during recent years, and during the period of prevailing high prices for grain, than ever before. We used to think that about the only way to make pork was to shovel the corn out to the hogs. Today we have found that even that was an expensive process when we had high-priced corn, and if we can grow something on the farm to be utilized as a forage product that is a great deal cheaper than the corn and that will take the place of one-fourth or one-third of that corn, it is a more profitable process than to feed expensive, high-priced grain.

It is the same principle as involved in the limited grain ration for cattle under the conditions which I have outlined, and perhaps gives even better results, because we don't need the high degree of finishing with our hogs any more, if we have the right kind and the right type, in order to have them top the market. That is, feeding them out to the last degree of finish is not as essential in hogs under the marketing conditions which we have now and which we are likely to have in the future, and with the supplements for lard that we have, as it has been in the past. So that a large part of the pork product made upon the farms can be made from forage crops, and if we were to just adopt this policy as a uniform policy of even putting the feeding lots that are idle and growing up to weeds in the summer on a great many farms, in fact, the majority of them—if we would even put them into rape and have a few acres of rape grown there and turn the hogs into it, especially the pigs at weaning time, we would have thereby an immense saving. That land is the land that will produce an abundant crop of rape, which would be fed off, and the land will be available for use again. And then if a few acres of clover and alfalfa pasture can be available so that the hogs can be put on that and make a good part of their gains from that, it will be cheaper gains than are made from corn; and this alone amounts to a saving that will run into millions of dollars a year.

Then one of the more recent lines of work we have been engaged in at Ames, and having a very direct and vital connection with profitable reproduction on the farm, is that of minerals for swine. It is found that swine make very great gains and there is a wide degree of variation in the gains made by swine. Sometimes we are not able to account for it. Our hogs are not always thrifty, not always making the gains that we know should be made, and it is attributed to something essential that is lacking. Investigations show that minerals in the hog's system are very important factors, and we have tried a good many different mixtures and kinds of minerals.

The feeding of these minerals has given increased gains at relatively small cost, not only in fattening swine, but with brood sows and growing pigs; so that unquestionably the supplying of minerals to the extent of meeting the hog's need in the ration is one of the fundamental factors in getting the best results.

Now we have tried a good many, but we have come to the conclusion that it is unnecessary to have a complicated combination of mixtures, or a wide or expensive variety. We have found one of the best to be as follows: Salt, 20 parts in 100, and then limestone, wood ashes or air-slacked lime—either one of these—for the next 40 parts; that is, the limestone to be finely ground limestone in the form to be utilized when the hog consumes it, and then bone—bone meal or spent bone black or bone ash, any one of these—for the next 40 parts; the total of these making 100 parts.

Those are not expensive products, and the farmer can buy them and put them together, or you can purchase them from someone who has put them together, and you need not pay the extravagant prices that they would charge for the so-called commercial feeds or condition powders or proprietary remedies, or whatever they may call them, that are being sold on the market. A good many times these products are being sold on the market that will contain about these ingredients, probably never give any better results than these, and they will be sold at ten times what it would cost the farmer to buy them and put them together himself.

These can be fed either by the free choice system of allowing the hog access to the minerals, and the hog is a pretty good judge of what he wants to eat and what will give good results. That has been demonstrated clearly. It can be done by the self-feed system or free choice system. The hog knows how to balance his rations if he has access to the feeds he needs. If he has access to the minerals he will take what he needs. He won't take any more than he needs. Or if you want to add it to the ration, it can be done in that way. It will not require for that a great cost, not over a cent a pound per pig per month. So it is a relatively small amount. There is a means of increasing the gains and turning the hogs on the market sooner and increasing the profit. It means a shorter feeding period and increased gains.

President Sykes: Would you tell the convention about what that would cost them, that mixture as you suggest it there?

Dean Curtiss: Some of these products are very cheap, for instance, common salt. This ground limestone is a cheap product. It ought to be finely ground. That costs comparatively nothing. These other products will vary somewhat in price, but the whole thing, mixed, made up, would not cost over a cent a pound; perhaps could be bought for even less than that. We have also added to that one ingredient which I have not mentioned. It may be added or it may not, but it is not absolutely essential. That is about one-half ounce, or an ounce, in the hundred pounds of potassium iodide. That is more expensive, but there is so little of that used in the mixture that it has relatively small effect, because it will be less than a pound every hundredweight.

I think the practical way to get this, instead of the individual farmer buying these products in small quantities where he will probably have to pay high prices, would be for people who are living in a community to have someone buy them in large quantities where they could get wholesale rates on them, and put them together and then supply the material mixed and ready to use at cost, and in that way it would not need to cost to exceed a cent a pound, and there are times when it could propably be purchased for considerably less than that, especially if bought in large quantities. If you bought it in the form of some prepared food products sold by agents and distributed through the drug stores, you would probably pay ten times that much for it.

These are some of the important lines of investigation that we have had in progress and have in progress yet and are working on all the time. Perhaps in this connection, bearing upon the question of what the experiment station is doing for the feeders and the farmers of Iowa, it might be pertinent to ask what the feeders and the cattle breeders of Iowa are doing for themselves;

and I would like in that connection to emphasize one thing that is of vital importance, and that is better bred live stock on the farm.

I was talking a few days ago with a man who has been associated and in close contact with the market business of one of our great market centers for a quarter of a century, and this was his statement, that there had not been a time in all of his experience in connection with the live stock markets when there was such a wide gap between the well-bred and the well-finished stuff and the common run of stuff that was coming to market as there is now; and it is his opinion that we were not making progress in the breeding and the inherent quality of our live stock, and the reason that the second and third-class stock coming to market was bringing such low prices was because of lack of breeding and lack of proper methods in growing and feeding it out.

I don't think there was ever a time since you men have been engaged in the business that it was so important that you have good, well-bred stock to feed out under these conditions of high-priced labor, and everything entering into the cost of beef production being on the high level of prices that it is now, that it is so important that you have well-bred stock to put into your feed lots and that you have well-bred stock on your farm.

The dairy interest has made tremendous strides. While the dairy industry is a legitimate and a sound industry, it is one that has not helped the grade of feeding steers that you people put into your feed lots, if you use the dairy blood. It has its place all right, and it has made great strides in Iowa, and several million dollars' worth of dairy stock has been brought into this state to be put on the farms. It has been put there because it is sound practice to have good dairy stock, but with the tremendous growth of the dairy industry in this country there has been a constantly increasing number of animals going to market for beef purposes that carry dairy blood. And then there is a very large proportion of animals going to market for beef purposes that do not carry any good blood. I don't think there was ever a time when it was so important that the farmers of this state and other states use good sires as it is today.

We know that the steers, if they are using good sires, may be fed out profitably; and if they are using dairy sires they recognize the importance as they never did before of having superior animals there, and we are becoming dependent to a larger extent each year upon the animals bred on the farms or somewhere else

—on the range. While I do not think that the range possibly is going to disappear and that place will vanish as a source of supply for feeding cattle for many years, yet I think that the farmers have not kept pace in the improvement of their stock—beef stock, I refer to especially, with the range breeders, and a great many of our cattle that are going to market sell at a low price because they have the inherent handicap of inferior blood.

You men as feeders can exercise a marked influence in your communities if you will impress that upon the mind of the common farmer who keeps a few beef cows or grade cows and raises a few steers that he sells to you or somebody else to feed out, or if he feeds thems out himself, as a good many do, in single carload lots or less. I say that there is a place where there is room for a very great improvement. We have heard a great deal about the high cost of transportation and a great deal of complaint about it and the injustice of it. It puts a certain handicap upon farming operations. We are going to be under a serious handicap until we get some relief. But here is a place where a handicap far greater is put upon the farmer's operations by lack of good sires, good live stock. We are paying a bigger overhead expense through the lack of good blood on the farms than we are paying even at the increased cost of transportation at the present time. The remedy for that is in our own hands, and we can get results probably quicker than we can in securing lower transportation, although we ought to have results in both ways.

I mention that to you in connection with these other subjects because I believe that that is something that goes home to every one of us, something in which we need concerted effort and intelligent action in Iowa today more than ever before in the history of the state.

Mr. Ames: You spoke of soy beans. Is there any trouble keeping them? How about storage?

Dean Curtiss: I don't think there will be much trouble, possibly a little trouble. We have not ground it or handled it in large enough quantities to be absolutely sure of that; but our experience does not indicate that we are likely to have any serious trouble.

A Member: Do they have to be ground?

Dean Curtiss: It ought to be ground for cattle or for hogs, but not for sheep. It may be fed to cattle or hogs.

A Member: How about the plant, can it be ground?

Dean Curtiss: Yes, I think it can. We are doing something right along that line. I believe we can take the entire plant and put it through a mill something like the mills they use for grinding alfalfa, and that soy bean meal, including the plant as well as the bean, will be far better than the ground alfalfa, because it will be richer and more potent and more effective. As I stated, our experiments indicated the value of soy beans for feeding swine to be 80 per cent that of tankage. In that we used the meal alone.

A Member: Eighty per cent where it is used without grinding?

Dean Curtiss: No, that was ground. When we had high prices we had $17.50 more profit from using standard supplements, cottonseed meal and linseed oil meal, than we had from using prepared commercial feeds to supplement corn.

Mr. Gunn: Have you used phosphorus?

Dean Curtiss: We have used phosphorus at Ames. We have had about as good results from a simple mixture like that mentioned, and the phosphorus is a more expensive product unless you use ground phosphate. If you use ground limestone—

Mr. Gunn: Ground rock phosphate?

Dean Curtiss: If you use ground rock phosphate; if you buy phosphorus in some simple form.

A good many farmers in filling silos each year put soy beans in with the corn. They let the soy bean grow in the corn to maturity, so that the bean in the pod goes into the silo with the corn, and that does make a marked improvement in the food value; and it makes a marked improvement when you turn the hogs in in the fall when the beans are hardening, which is just the time when the corn is in the best state.

There is a tremendous difference in the varieties and yield from different varieties of soy beans, and we probably will put out some publications on that. There are hundreds of varieties of soy beans. Some of them will yield three or four times as much as others, and we find that it is well to have the varieties that will give the best returns in this climate. In other climates it might be different. But some of you, if you get hold of the wrong variety or some of the poorer varieties, might be disappointed in the results you would get from soy beans. We are testing out a great number of varieties each year.

The President: We would like to continue this discussion. I know it is very interesting. But you understand, gentlemen, our time is very limited here, as I have already stated to you. We are obliged to give possession of this room at a certain time, and I think we will have to close the discussion at this time.

A Member: Might I ask if the information that they are trying to get from Professor Curtiss is not published in bulletins that could be obtained from the experiment station?

Dean Curtiss: Yes, we have that all in the form of bulletins and circulars. We will probably put out an additional circular giving information about the different varieties of soy beans prior to the time for planting in the spring.

A Member: We can not secure any ground limestone. I would like to ask Dean Curtiss the address of any firm that puts it out in that shape.

Dean Curtiss: There are a number of places in the state where you can buy ground limestone. We have bought it at the rate of $1.25 a ton, or $1.50 a ton when applied to land, some of our land that is acid. The closest place that I know of here is the Iowa Falls Limestone Company. In the eastern part of the state there is a region in Scott county about Buffalo where you can get it. There are probably half a dozen places at least where you can get it, regions where we have limestone, where they are grinding it. It is a by-product of the limestone mills. You can usually get it very cheap.

The President: Now we will close this discussion at this time. The next number on our program, as you will know by the printed program, is a young chap that we brought out here from Chicago, and we brought him from New York to Chicago. We have transported him around over the country quite a little. He worked for Uncle Sam for some four or five years, in the Bureau of Markets and in the administration of the stockyards during the war, and for a while he was with one of the largest commission companies in Chicago after he resigned his position with the Bureau of Markets. And then the Farm Bureau got hold of him and toted him around a while, and last spring when we were looking for a manager to put in charge of the Chicago Producers' Commission Association, we went over into Ohio and made a little search there to see if we could locate the young fellow, and finally we ran onto him over there connected with the live stock department of the Ohio Farm Bureau. So we brought him forth and set him down in Chicago and put him in charge of the Chicago Producers' Commission Association.

Now we have brought him out here in order that the Iowa people, the Corn Belt feeders and the Co-operative Shippers, might come in touch with S. W. Doty, the manager of the Chicago Producers' Commission Association, and at least look him over. Now Doty was out here a number of years ago, and you older fellows will remember him, but a lot of these young men were not here then. When he first became connected with the Bureau of Markets, he came out to a corn belt meeting and made us a talk, I think about the first year he was at Chicago. And while he is awful busy down there at Chicago, on account of the rushing business they were having this week—yet he cut loose and came. So without any further remarks I am going to present to you at this time S. W. Doty, manager of our Chicago Producers' Commission Association.

CO-OPERATIVE MARKETING AGENCIES

BY S. W. DOTY

I am mighty pleased with the privilege to meet you men who represent the backbone of Iowa's live stock industry, and to tell you something of the Chicago Producers' Commission Association, which, after all, is your own terminal selling agency at the Chicago yards. As you know, Mr. Sykes, your honorable president, is president of the board of directors of the Chicago Producers' Commission Association; and before going further, I want to say that no little credit is due him for such progress as has been made to date. Not only has he put in a great deal of time and hard work in the setting up of the organization there, but his standing in the live stock world and his reputation for square and honest dealing has been an inspiration for all of us boys who are serving you on the market.

It is not necessary, as I see it, to describe the plan of organization of the Producers' Commission Associations. That has been published and talked so many times and so much in the past. Of course, you all understand this plan originated with the Live Stock Marketing Committee of Fifteen, which was appointed by the farm bureau a couple of years ago. There are now producers' terminal selling agencies at the following markets: East St. Louis, Indianapolis, Chicago, Peoria, Buffalo, and Fort Worth, and they were started in that order. Plans are under way for opening similar organizations within the next few months at Cleveland, Pittsburgh, Cincinnati, Kansas City, and possibly Sioux City markets. So you will see, men, that they will have a chain of producers' owned and controlled terminal selling agencies at these markets to serve you in such a way as you will use them.

All of these producers' agencies have had their difficulties in getting started on these various markets. The principal trouble has resulted from discriminatory practices and I am very glad to say that these troubles have been maintained through the benevolent activities of the men who are designated to carry out the various regulations of packer and stockyards administration. While all of our troubles have not been eliminated, I am frank to say that the packer and stockyards administration act has been of great help in getting these organizations started.

The Chicago Producers' Commission Association started, as you know, June 19. We are now what you would call a six months old baby. During that six months period we have had consigned to us and sold 3,700 cars of stock, representing, in round numbers, 235,000 head of live stock, and in value, $5,199,548. The commissions received for handling this stock, in round numbers, amount to approximately $70,000. That is a brief summary of the business of that organization to date.

In talking of the Chicago Producers' Commission Association, I am afraid I am about in the position of Pat, who had something weighing heavily upon his mind and went to confession. There he said, "Father, I have got something that is bothering me. I want to confess." "All right," the father said. He said: "Father, the other day I was working in the back yard, and I kissed Mike's wife over the fence." "Well," the father said, "how many times did you kiss her?" "Father," he said, "I came to confess, not to brag." Now it is not to brag about the commission business here at all; it is just to tell you some of the facts about the organization and some of the things that we have been up against.

Mr. Sykes told you he was present during the setting up of the organization. We ran up against many rough spots, and in fact we have not ridden over all of the rough spots yet. We are about in the position of the Ford—it rambles along and gets there just the same.

Our first problem was to get men, salesmen, to handle this live stock whom you men could have confidence in, who had the ability and who could get the idea of the co-operative business. That was not an easy thing to do. A great many of them—of course, their first thought was to hold us up—demand large salaries. Mr. Sykes and I adopted the policy at the outset that the best was none too good for the Producers in the way of salesmanship at the Chicago yards.

Of course, as has been the history of co-operative selling agencies, their business has run largely to hogs. We anticipated that from the outset. We knew that it was going to be more difficult to influence the cattle men of the country to break away from their old ties and patronize their own organization, so we were not disappointed, although we felt at the same time if we ever were going to get that cattle business it was necessary to have the right kind of men. Naturally our salesmen—you have probably heard criticisms or talk about the country; you can hear anything you want to—that they are a lot of high paid men. But, men, I want to tell you that there is not a man in the organization who is receiving a salary but what he could receive from other commission firms there. They are right in line, and I know not as high as many of the firms are paying their better salesmen. So you can eliminate that from your thoughts.

I am not going to try to load you down with figures or anything like that, but I have a few here which I think will be rather interesting. Naturally, our business has been largely from co-operative associations. They are the people who have given us the support from the outset. To give you some idea of the amount of co-operative shipments received at the yards at Chicago, and what we have received of them, I want to give you a few figures which were obtained from Mr. Harlan's department.

In July, there were 3,703 cars of co-operative shipment received at the yards; August, 3,696; September, 3,060; October, 3,968, and November, 5,106 cars of stock from co-operative organizations. In November our total business was 800 cars of stock. We had 172 straight loads—that is, loads from individuals—one owner, making a total of 628 loads from co-operative organizations. Those 628 loads represent 12.3 per cent of the total co-operative shipments received at the yards.

To go still further and give you some idea of the work necessary to handle this business for co-operative shipments, in those 628 loads they averaged 8.4 owners per car, making a total of 5,447 individuals that we did business for during the month of November. Now our business as compared with the total receipts at the yards for the month of November was 3 per cent of the total receipts. Our total receipts represented 3 per cent of the total cars received at the yards; and we received 5.7 per cent of the hogs for the month of November. In brief, that is a little analysis of the business to date.

Just a little line as to our outlet. At the outset I am frank to say all we had was the packers to buy our stock, and it made it very difficult to operate at certain times. I feel that most days the packers paid us as much for that stock as they paid anybody else; but, generally speaking, the shippers and yard traders go out and buy stuff, particularly during the summer, at higher prices than the packers will pay; and some days, of course, it made our sales look bad. But it was not due to anything in the organization which could be helped at the time.

On August 10, through the efforts of the packer and stockyards administration discriminatory practices were declared off, and the market was declared open. To be sure, it was not 100 per cent at the outset, but every little bit helped, and our September business showed that 40 per cent of our hogs went to shippers and yard traders, and since that time there has been a gradual letting down of the bars until at the present time shippers, yard traders, large and small packers are dealing with us freely.

I am frank to say that while the impetus was given originally through the packer and stockyards administration, a great deal of—well, more than any other one thing, that can be laid to the personnel of your salesmen that we have there toward other buyers in the yard. They were anxious to trade with us just as soon as they possibly could, and they did, and some of them went so far as to be ostracized from stockyard society in order to trade with the Producers.

Now, men, you understand we are not members of the Exchange. We have absolutely no ill feeling toward the Live Stock Exchange. On the contrary, I, for one, am willing to acknowledge that they have done a great deal of good in the past in the way of helping to keep down bad practices at the yards. Our policy has been to follow out the rules and methods of trading practice as outlined by the Exchange just as far as we possibly can—in other words, give those fellows absolutely clean, honest competition. That is what they have had every inch of the way.

We try not to antagonize them any more than we can possibly help; and while we may have been given credit for other than that, you can take it from me that it is not so. We have been busy enough looking after our own business without bothering the other fellow.

(President Horlacher presiding.)

President Horlacher: I know we have all appreciated Mr. Doty's talk. While he didn't tell us how to raise and feed our live stock, Mr. Doty has tried to tell us something about the selling end of it. We have with us now a man who needs no introduction. In fact, he is far better known in this state than I am. He is going to tell us something about transportation. I am pleased at this time to present Doctor Nourse, of the Iowa State College, who will talk on transportation.

RAILROAD RATE PROBLEMS

BY PROF. E. G. NOURSE

Mr. Chairman, and Gentlemen: I think the chairman was just about right, friends, when he said I was going to tell you something of transportation, as related to live stock. I think that it is possible that the most of what I may say relates to something other than what is set down as the topic of my talk this afternoon—Railroad Rate Problems.

I can not forego the opportunity, however, of saying something about the work that we have been doing up at the college in connection with the economic side of the live stock industry, and I think it is logical enough to begin with that, because what I say about transportation simply grows out of a program of work reaching back a number of years, and I want to run over very hastily what we have done there. So it will be something in the nature of a report upon that live stock marketing work, and also I think I am justified in taking this opportunity in connection with that to explain somewhat our attitude, our conclusions, with reference to this whole co-operative live stock shipping and selling problem.

This is the last time I shall have an opportunity to appear before you as the representative of that line of work, and it seems to me that it is such an important time in connection with the whole development of that, that I hope you will bear with me if my story seems to be a little bit long.

Now when the agricultural economics section of the college was established and began its work a few years ago, we had one idea in mind, namely, that we would not scatter our energies. Our offices and personnel were limited; we could not afford to scatter our energies over a lot of fields. We had to pick out one field which we considered of paramount importance, one subject which was timely, and to start in at some logical place on that and to stay with it until we got through to some place which would result in doing something of real, permanent, constructive benefit.

You will have to be the judge of whether we have done that or not, but I state at the beginning that that much is what we have been trying to do. We therefore began our work in connection with the marketing of live stock. The reasons are obvious. The live stock industry is, in terms of dollars returned to the producers of this state, the one which is financially most important. We approached it from the standpoint of the co-operative method of handling live stock shipments, which just then was at the peak, or perhaps in a boom period—a highly stimulated period of growth. We found that co-operative live stock shipping associations had had an unprecedented run, 310 such associations being formed over the state in a single year.

We therefore felt that it was quite possible that some of that growth was rather hasty, and that the foundations were not laid as permanently as they might be; that there might be some danger of mistakes in connection with that movement or the uncertainty of a going business with some of those associations. We therefore conceived it as being one of the greatest opportunities that we would have to put our efforts at the beginning in the careful, systematic, impartial study of that method which was assuming so great importance and on whose success so many people in the state were pinning their hopes at that time.

Possibly some of you have seen the experiment station bulletin, No. 200, in which we gave a report of that survey. We did simply the first study, a general study, trying to get our bearings. It was not the end. We did not merely care to go out and get the information and say there are so many associations and their management made so much, and they handled so many cars of stock. We wanted to make a quantitative measure of that movement, but also we wanted to make a real economic analysis of what it was doing, what it was trying to do, the methods it was following and the soundness of those methods from the standpoint of modern business organization, because we looked at it this way:

That movement was not merely 647 little individual shipping associations here and there; but, take it altogether, they represented a statewide effort of the live stock producers of this state to go into the business of handling the marketing of their live stock for themselves, and as we showed when we did count noses and measure the value of those cars, it represented a business in that year of $100,000,000.

Now if that thing is going to be handled on a satisfactory basis, we must bring to bear upon it all that is known about good, sound business organization in general, and in particular all that we know about the peculiar form of business organization which is known as co-operative today, if the farmers of the state are going to incorporate a great, statewide business with a product of $100,000,000 and handle it in a really efficient and a really economical manner and are going to accomplish real, significant savings and a permanent improvement in the method of marketing live stock.

All right. After we had made our study of that shipping association movement as it stood at that time, all of the men who participated in that study felt that certain outstanding conclusions could be drawn from that. We felt that our first fear was more than justified, namely, that a great many of those organizations were on a very insecure basis, that there were certain outstanding weaknesses in the plan of organization and of operation. We found that in a great many cases the association had been formed because the people thought they could accomplish something through that, and when they had gone through the preliminaries of organizing the association, getting a certain number to sign on the dotted line, and then it came to the practical problem of handling the shipping business of the association, they looked around to elect a manager, and they said: "Well, George, you better do it." George couldn't do that, and he said, "No, let Bill do it." And that managership, that important business position on which the whole success of the association depended, was knocked about from one to the other, and very frequently passed from one to another every month or two, so that you might have three or four managers in the first six months of the association.

Generally there wasn't any six months' period under those circumstances, and in a large majority of cases it finally ended up in the hands of a man who hadn't had anything like a business training for the carrying on of that sort of business. We found that there was really not any constructive business move for the improvement of live stock shipping going on in the case of a majority of those associations. We felt that the problem of working out with these managers who were anxious enough to do just that thing but didn't know how to get into it—for us to work out with them some principles of sound organization and of good business management and of good accounting, was the first thing by which we could carry through from that initial stage into something that would be a constructive and permanent help to guarantee the success of those local shipping associations.

We looked ahead a year before that and had stolen away from some people who wanted him, a man who was particularly well qualified to work out the accounting problems and the business management problems of the local shipping association. Mr. Robotka, of our staff, perfected a simple system of accounting for local co-operative live stock shipping associations, which in the form of a bulletin is now in press at the station, and will be out in the course of a couple of weeks probably, a system in which the experience of all this group of states through here, who also had a great body of experimentation and experience with shipping associations, was drawn upon and the forms which were finally worked out are now being used all over this state and are being ordered from other states because of the fact that that really represents the final result of the experience in co-operative live stock shipping today.

Now we still had that feeling that we wanted to follow through, start in at some proper place and follow through, these problems until we could get results. We could not stop when we simply had found out amongst a small, select group of people what was necessary in the way of accounts which would put such an association on a real business basis. That might be known to a few people. Some form might be drawn up, but you can not stop there unless that actually is carried out to all those managers so that they have at least an opportunity. There is no coercion in this, but so that any manager who really wants to study the business management of a co-operative live stock shipping association has that opportunity. If you do that, then you are really getting that service under way.

So the job that was begun in the experiment station passed over to the extension organization, and, believe me, they squared up to it. They put on the men that were necessary, and a series of managers' short courses was held over this state last year. Many of you know about that, first hand. Others are being held this year. Mr. Thompson, who has been in charge of the work, is going to explain some features of it in detail tomorrow. I am not stealing any of his thunder. I just want to pass through that and to our next problem.

What have we done up to that point? We have worked out a model system by which any co-operative manager of this state who will give a few days to studying that may have a simple system of bookkeeping by which he will set down regularly and systematically, and on a model, uniform system, all the facts which are essential to the continuous study of the factors of success in that business. Just exactly as under the Interstate Commerce Commission it developed a uniform system of accounting for the railroads and as any big business organization through its head accountant does work out such systems so that they can make a comparative study of the results of this office or that office, this branch or that branch, this department or that department and also get final figures as to the financial results, such a system has been worked out so that it is now possible to make an actual statement as to what shipping associations are doing, to compare one shipping association with another, to compare results which they get in one market with results which they get in another. In other words, when you get, as we have, a large number of associations keeping accounts on that basis, we really can have authoritative information as to the factors of success or of failure which enter into the day-to-day operations of every shipping association which elects to go on that plan.

We felt sure that if we made that sort of a scientific business study, because that is just what they are, and every sort of really progressive modern business organization is doing that, we felt that we would get results there which would enable us to find where the leaks were and to find which method of handling shipments or running the association really results in saving. That is what the farmer started out with. He said: "We can make a great saving by co-operation." I say you should practice that. I believe you can do it just by doing that, not handling your business in a loose sort of way. If the shippers of this state will start under the co-operative plan and devise a real business system and eliminate wasteful methods with a lot of leaks and a lot of guesses and a lot of uncertainty, if you will put it on a basis of uniform records and then apply business analysis, you will find certain very illuminating facts which will be the foundation upon which the co-operative movement may build forward today in this state, what the California Fruit Growers' Exchange, for example, has done in California, namely, get at the factors of waste, improve their shipping practice and their selling market rules, which is their best home outlet and the cheapest way to get it and actually reduce expenses.

Now I think we have passed to that third stage at the present time. I can hardly say some things about the results of the work that has been done without encroaching upon Mr. Thompson, but there are some people here who will not be in the meeting tomorrow. Seven counties in this state now have organizations through which those figures are being studied by a surveys committee on that comparative basis; and if you were to talk to any of those managers, I think that every one of them will say they are learning more about the business from the scanning of their own reports, and then by comparing those reports with the reports of other associations in that county, than they ever dreamed was to be learned in that business.

Now I want to say just a word in that connection as to how far we can or should go in connection with that work. It is very obvious that the experiment station or extension service is not authorized to go into the business of running co-operative shipping in this state. I think that thing is perfectly clear. On the other hand, we know it is apparent that there is a problem to be investigated there. We felt and still feel that we were amply justified in going in and rendering such service as we could through a trained staff of specialized workers, such as we have been building up there. We could not indefinitely supervise the work of shipping associations in these seven counties or any other counties. In other words, that was first an investigational problem, the work of the experiment station. It was, second, a demonstrational problem.

We had to take those results out and show them, just as the results of feeding or any other work are taken out to show the state what they mean, and the value of those results, and the benefit which can be secured by following those methods. It is not our function to carry through the commercial operations in which those results will be applied in day-to-day operations; and you will see that in developing my subject in this way, I am explaining somewhat our attitude with reference to co-operative organizations and development.

We feel that there is along just these lines a work of supervision and of assistance, if you please, of overhead service, such as the head office of a big company renders to all its parts, which must be done outside of the local village where the shipping point is located. That is the conclusion which has been impressed upon us at every stage of our study. You can not expect a local group of farmers to find the right sort of a manager and get him started on the right sort of business methods, and keep him lined up to give the service with reference to a very large number of pressing problems which are coming up in the operation of that association. In other words, the local association can not go it entirely alone.

I think that the experience of shipping associations in this state, running back many years, running, if you stop and study the records, away back into the Grange days even, is that there were many, many failures and comparatively a small number of successes that ran over any long period of years. A very large number of associations were formed a few years ago which made a promising beginning, but whose future stability often depends upon being welded into some sort of a system which holds them in their place and enables them really to get the benefits of big business organization, which I take it was the goal toward which they started at the beginning, and the only way through which co-operation is going to bring any real substantial business saving to them.

So if any of you have some time to waste and will turn back to this "State Co-operative Shipping Associations," you will find in the back of that a statement made as to the necessity of welding these local associations into a state-wide service organization in order that that work might be performed. We believe that the experience of two more years since the time that was written has reinforced the conclusions which we had at that time as to the necessity of such an overhead organization, if the local associations are to be supported and served and kept in a healthy, progressive, growing state.

The time, I think, has arrived and it seems to me that in these annual meetings which are being held today and tomorrow, history is going to be made. We know very well that since the time we made that survey the number of shipping associations has declined. We have not made a re-survey, and we don't know how much. We know that the volume of stuff shipped co-operatively is considerably less today than it was then. Well, that is some of the wind going out of it, that is true; but the question which is up right now is this: Are we going to, right now in this very important transition period, are we going to say that the co-operative shipping movement is really a sound, sensible, sane sort of way for farmers to get together and handle their live stock shipments, and put the business on a solid basis and let it build forward, not too rapidly, but build forward solidly and permanently and to achieve really progressive results? That decision has got to be reached, I think, because if no decision is reached, I think there is hardly a question but that we will see the gradual further decline of the co-operative shipping movement. It don't disappear. It can not possibly disappear, but it will drop back to a situation in which we have a few local associations which get on a permanent basis, but which do not actually do anything very significant for the live stock shippers of this state. They would make some small local savings, but they would not do those real big and significant things that the co-operative society started out with.

It seems to me very encouraging that the State Federation of Co-operative Shippers has accomplished as much as it has through this past year. It seems to me very fortunate also that there is a getting together of this young organization of the live stock industry with the old association which has been established and has rendered so much service to the live stock shippers of the state back over a long period of years. I hope that the fellowship may be made stronger, that the support of the old association will be rendered in every tangible form to the younger association as time goes on. I want to suggest in that connection what it seems to me is aside from this matter of building up a commercial organization in which the local associations may be federated, through which they may select and train and promote managers, through which they may start a study of their business. I think in addition to that there are several very practical important problems, jobs which are up to such an organization.

Once you get to the point where you begin to have a stream of regular business statements coming from the association, you can begin to analyze the items of expense, and the whole co-operative movement starts out to reduce the expense item. Once you begin to analyze the items of expense, and the whole co-operative movement starts out to reduce the expense item. Once you begin to analyze those items of expense you see that the transportation cost looms up very large. The history of the Corn Belt Meat Producers indicates that. They realized the importance of that particular phase of the work, and years ago they tackled it and from time to time through their history they have been working on it.

But I venture to suggest that what is needed for the shipping industry of this state is not merely the excellent organizations of the Corn Belt Meat Producers to have it attend to certain rate problems, but what is needed is a real traffic organization in some sort of a permanent system with the shippers' organization constantly studying every phase of the traffic problem as it presents itself to these local associations.

We find, for example, that in the first place the local manager's losses are larger than they need be, and that is a service which this department should be getting at. In some cases it is poor train service, which could be improved. In some cases it is poor loading, not properly cleaning the cars, overloading, a lot of questions which start right at the loading station but which reach forward through the whole transportation system into the terminal market.

We find that the local manager knows very little about transportation methods. He does not know from the occasional use of a car the rates that are charged, whether he is getting all that he is entitled to or not. Losses occur from time to time. He does not know exactly how to present his claims and to present them in the form which will most fully insure the collection of the part which is a just claim. In a great many cases the charge which is made is not the correct charge. He is not a traffic man, and he is not in a position to check up on that.

Now I submit that the business which ships $100,000,000—well, not that now, but could very well ship a good deal more than that if the co-operative shipping movement was universal over the state—but a business of that magnitude—call it $50,000,000—a business of $50,000,000 that has no traffic department, no one to check up to see what the freight rates are, that you take advantage of the freight rate as fully as possible, no one to audit the freight bills, no one to systematically present claims, that is a business which is very loosely organized and in a very weakly managed condition.

Seems to me that the lesson of the figures which they are getting at from these shipping associations indicates very clearly that there must be some organization in competent hands and a trained, professional traffic man on the job, I guess we can say 365 days a year, because they ship stock on Sundays so often, who should be on the job the year around to render service to all these shipping associations so that their bills will be audited, and the results from that will largely support the bureau, so that their claims will be—in the first place, that the cause for claims will be reduced to the very minimum, and that when claims do arise that they will be presented promptly and in such a way as to get the best attention and the first chance of collection.

Now there is another phase of that, and for that I want to use a map which I brought here. The freight rate structure, as you all know, is a funny sort of a critter. It just "growed," like Topsy, but I believe it "growed" crazier and crazier than ever Topsy "growed." I don't profess to be a traffic man myself, but even an ignoramus in those matters can see the intricacies of the situation and the pecularities of the situation, and just because of his ignorance, I think, because of the limitations of his knoweldge of it, can see how impossible it is for the ordinary, untrained local shipping manager to cope with it.

The picture we have here is that of the freight rates on hogs to the Chicago terminal market from the state of Iowa. Particularly over here in the eastern part of the state you see a very curious situation. You probably can not read the rates from there—rates of 25 cents, 26, 27½, 26 1-6, 25, 24½, running through there. Down in here, 23, 24½, 27—a little pocket there in which they are 27; a little pocket in which they are 26. And the St. Louis map, a still more complicated situation, in which you have rates of 24½ and 31 cents side by side, with 26 cents in this area here, 28 in a little pocket here which runs across two others which are 29 and 26 cents side by side.

Now, what is the result of that? It means that managers are shipping their stock by the one way that they have happened to stumble onto, whereas routing it another way or knowing what the actual possibilities of rate-making are for their station, or in many, many cases where railroads are close together delivering to one station instead of another, would mean a very considerable saving.

In Ohio, for example, the live stock shippers there have got a traffic department on the job, and they recently supplied that traffic man with a problem. They were bringing in some feeders, and in the first sixty-six cars of feeders they brought in they found that not a single freight rate had been figured correctly. About the same situation would apply in many areas in this state.

There are two problems really which confront the farmer when he organizes to improve his handling of his marketing problems. The first one is to perfect an organization around the existing market system and the existing freight structure, as other well-organized businesses, so that he really will be getting the maximum advantage of that organization as it exists, that he will route by the cheapest way, that he will choose the market which gives the highest net dollar. And that means not merely looking from this area here to the quotations of St. Louis and Chicago, but of knowing very definitely the freight rate differentials in order that he may figure down to his net charge and not be misled by the market quotation; that he may figure it down accurately and take advantage of the odd half cent or cent even.

It means an organization also that would permit of shipping possibly at different times from different shipping points in a territory in which several railroads are about as available. That is the first thing. And then the matter of auditing bills and checking up and of pressing claims and of calling for better service of getting better facilities at the local yards, and all that sort of thing.

There is a great big job which could be done by that $50,000,000 shipping industry in this state, which presses in burning needs to be done, which must be done before you can see co-operation really as a constructive agency for meeting shipping conditions and reducing costs. That is the first.

The second one is, after examining that situation and finding that you are not entirely satisfied with it, to put the whole weight of that $50,000,000 co-operative shipping group, plus the other $50,000,000 or $100,000,000 or $200,000,000 that are represented by the other live stock shippers of the state, back of a demand for a reform where reform is really justified, and I think that the same map I presented here to show those local peculiarities illustrates that second class of service.

You probably know that the live stock rates of this state are based on the Mississippi river rate and the Missouri river rate, the Mississippi river rate being 25 and the Missouri river rate being 36 cents. For competitive reasons, those two basing points have been established, regardless of whether we think that is too much or too little, as a general level of rates. Is the rate structure built around those two basic points in a way which is equitable to the Iowa live stock producer? I think not. What has happened?

Competitive conditions have meant that the railroads could not get more than 36 cents from live stock shipped from the Missouri river points. They could not get more than 25 cents for live stock shipped here. (Indicating.) All right. How shall the rates in between be established? Normally, equitably, in the interest of the producer, they would be established by stepping up your rates from 25 to 36 cents across the state approximately in proportion to the distance, because that is our general principle of law making, that the longer haul should bear the higher charge and the shorter haul the lower charge; and you and I would start from the Mississippi river and would establish those rates by additions to that, distributing the whole 11 cents across the state on that equitable sort of basis. The railroads are not interested from the same point of view that we are, hence what did they do? They start from the Missouri river and take and apply their 36-cent rate just as far back as they can—in other words, until they get to the point where the local rate to the Mississippi river plus your 25 cents from the Mississippi river to Chicago makes 36 cents.

They push this 36-cent zone clear over to the middle of the state instead of having it apply to about fifty or sixty along the western side. That means pushing all the rest of the rates over here. Starting across the state, with approximately 300 miles, we find that an advance of 7½ cents is made in the first hundred miles, leaving only 3½ cents, the remainder of that 11 cents, to apply to all the rest of the 200 miles, and in that 200 miles the maximum rate is applied to 120 miles, which means every producer in these zones is bearing more than a proportionate part of that freight burden.

That is a little bit like telling an old story to the Corn Belt Meat Producers, because they knew all that twelve or fourteen years ago. They knew that sufficiently so that they went before the Interstate Commerce Commission with a case asking them for an equitable zoning of live stock rates across the state of Iowa, and they had quite a case. They put up a pretty good fight, and when they got through, they had that kind of a map—approximately that. There are some changes. This is the present system. They had pushed their half-cent increases along here, in a substantially equitable manner until this territory over here was paying 33½ in some areas and 34 and 35 in areas all of which were paying 36 before, and still are paying 36 on hogs.

Some of you probably remember some of the reasons which entered into that. They started out to make out a case on cattle, hogs and sheep. They were interrupted. Certain other interests intervened. You decided—I suppose because you are steer feeders in the main—that you would fight for cattle rates and let somebody else take care of the hog and sheep people, the sheep interests not being so large and the hog interests being very large but not being organized at that time as they are today. Mr. Doty said co-operative shipping is largely hog shipping, so the hog shippers are organized.

When your case was presented, Judge Prouty was the man who was in charge. At that time they established the principle, approaching it from the producers' side, that this differential of 11 cents should be zoned out over the state in such a way as to be equitable to the producer, depending on what section of the state he lived in, or, in other words, his distance from the terminal market. That was recognized. The railroads were instructed to prepare a method. Some details were argued over, some compromises were made, but the essential principle was recognized by the Interstate Commerce Commission, was upheld by them, and has been recognized on several subsequent occasions in the case of class rates.

Live stock rates, as you know, are a commodity rate. But that same principle has been applied in the case of several subsequent hearings before the Interstate Commerce Commission and has been upheld. The principle upon which you fought and got recognized at that time is thoroughly incorporated into the rate-making philosophy today, and so you not only got your cattle rate at that time, but you laid a splendid foundation for any subsequent work which may be done in the interests of the hog men—the shippers of hogs and sheep.

You will agree that what I have had to say about rates is a comparatively small part of my story, but I want to, in closing, just emphasize that thing—that you are not going to get problems of that sort brought to a showdown and presented satisfactorily unless you have some business organization on the part of the different classes of producers which is organized on a professional basis, which is organized on a program basis, and which has the organization and the class of employes proportionate to the amount of the product and the value of the service which is involved; and it seems to me that we stand at the parting of the ways.

We have had a sort of unprofessional organization for the live stock shippers of this state. It seems to me that we have worked along with that unprofessional, young kind of organization about long enough. We can approve very heartily of the excellent things that they have done under a rather severe handicap, but the importance and the size and the value of that industry means that the time has come when it has got to step forward from those excellent small beginnings into a really big business type of organization, if it is going to justify its existence, if it is going to make an appeal to the shipper in the future by giving him results.

We don't have very much co-operation in the state of Iowa. I say that advisedly, because I have taken a good deal of time in the last few years and performed a considerable amount of travel to see what is done in other states. We have big problems here of our own. I do not see any reason, after a very careful study of what has been done in the commodities in which we are interested, and what has been done in other lines, I do not see any inherent reason why we should not have business experience and brains enough in this state to build an organization which would achieve a really distinctive service for live stock shipping—we are talking about that—and the others, too—but for live stock shipping, the distinctive service which has been performed for the shipping of fruits, vegetables and various products in other parts of the United States.

It would be a somewhat different organization, but it seems to me that the essential features of it are pretty well established. They standardize the local association, the overhead service organization with professional departments for the taking care of the several lines of service—and I featured traffic today—which are called for and effect the real success of those organizations. When we have done that, then we can put the support of that great, big, organized movement back of a terminal selling agency such as Mr. Doty has been explaining today.

They say they haven't got very much stock from Iowa up to the present time. They normally would expect, in view of the size of the live stock industry and the number of shippers in this state, a large amount. It seems to me that the whole future success of the terminal selling movement depends upon just two things, the two things, or the lack of which, caused the failure of a previous attempt at terminal selling. Certainly many of the older men in this organization are familiar with the fact that some years ago you had quite an ambitious selling scheme which was operated for a time.

Why did it fail? There were just exactly two reasons. Am I not right in this? When it went into the terminal stockyards markets it was boycotted and black-jacked by the selling organizations in those markets. It was hit on one side, and on the other side it was not supported by a well-organized, loyal group of shippers who really believed—hadn't gotten educated up to the point where they organized the volume of co-operative stuff to turn over to it and make the business when it started. Those two things wiped it out in every one of those five markets they started. It only took four years to put the whole thing out of business.

There is no reason on earth why all the effort that has been put forth by the National Live Stock Producers on terminal selling agencies at the present time should be wiped out in four years. As Mr. Doty said, we have today the Packers and Stockyards Administration, and with Mr. Wallace back of it, and the men who are in the Department of Agriculture, we can be pretty near sure that an organization of farmers who are organized on a business basis going into those yards will have a better chance handed them, for they are not going to be black-jacked. If they are able to put up a good, efficient business organization there, they are going to have a chance to put it across. So that it seems to me the problem is pretty well disposed of.

But that organization is not going to get the volume of business continually and without the cost of solicitation, and to be sure of what it is going to have, to put it on a really successful basis, unless back in the states there is a strongly developed, centrally developed, good service organization or shippers' federation tied into well-managed, standardized local associations. That is what I mean when I don't see any reason why we can not achieve the real results which co-operation can achieve in the industry of live stock shipping. I can not see any reason why we can not do it, but I feel perfectly sure that we won't do it unless we proceed on substantially those lines.

Either the shipping movement is going to go forward or it is going to go back. It has to be able to take an aggressive forward step pretty soon or it is not going to hold its own. It has got to show service and show results. It can do it. It has a great foundation laid, but it must be put, through the proper sort of support, in a position to go ahead and build up those lines of service, and I think that the field is ripe for the harvest.

The President: The next speaker on the program is Mr. C. L. Harlan, whom the Secretary of Agriculture has put in charge of this statistical work, this live stock census work that I referred to. So without any further remarks in the way of introduction I am going to introduce to you Mr. Harlan at this time, who will tell you of their plans and purposes in a short talk to you.

ADDRESS BY C. L. HARLAN

(Regional Director United States Department of Agriculture, Bureau of Agricultural Economics, of Chicago.)

I am very pleased to appear before you today, who represent the live stock business of the state of Iowa, and present to you briefly the work that the Department of Agriculture is doing in this new work of live stock estimates.

As you possibly know, congress at the session of last spring, made available to the Department of Agriculture an additional appropriation for the use of what was formerly the Division of Crop Estimates, to carry on similar work in the matter of live stock. This appropriation became available the first of July of this year, and since that time the Department has been engaged in trying to build up an organization to handle this work.

Before the work was undertaken, two conferences were held to take up with producers of live stock, marketing agencies of all kinds, and people who are interested in live stock marketing in any of its angles, the question of the kind of work this new division should undertake, how it should be undertaken, and what should be its general aims.

The first of these conferences was in Chicago, and covered representatives of the middle-west or corn belt, and the second was in Denver, in July, which took in representatives of the western growing—rather, producing—areas for cattle and sheep. As a result of these two conferences, a rather definite program of work was drawn up, and that is the program that we are now engaged in putting into effect.

In the matter of crop estimates, the efforts of the Department have all been centered largely upon estimating the amount of crops that were grown—that is, what has been the production in each state and in the country as a whole, of specific crops. They have never devoted any time to the marketing or available market supplies of crops except as those can be assumed from the general production.

With this live stock work, however, two distinct aims are in view. One is to estimate the changes in productions of live stock, the increases or decreases from year to year on farms and ranches of all classes of live stock, and the other is to estimate what are the available supplies of live stock that are apt to be ready for market within the shortest periods of time—seasonable supplies, and it is this work of trying to determine what are the seasonable supplies in which I am most actively engaged. But in order to get a background, a historical background, that can be of use in determining these probable available market supplies, it has been necessary for us to do considerable work in getting back data of what have been the live stock movements in the past, and we have been doing a great deal of work in the last few months with the different agencies which handle live stock from the time it leaves the farm until it finally goes into consumption to get dependable information along these lines.

This has been obtained from railroads, from packers, from stockyards. from concentration points, from all people who handle live stock. Our aim with the railroads has been to start January 1, 1922, and get a station record of receipts and forwardings of all classes of live stock by species, by months, from that period down to January 1 of this year for all railrods or for all systems west of the Ohio-Pennsylvania line and north of the Ohio river. That means that we have had to go to the railroads and ask them to either prepare this for us or make available their records by which we could prepare it.

When this is finally secured, it is going to give us a very valuable index as to what is the movement of live stock in the country. In Iowa, for example, our intention is to organize that on a county and regional basis. That is, we will take all the stations in a particular county and we will know the shipments in and the shipments out of all kinds of live stock in that county for each month in the year, and we will be able then to determine what is the importance of each county in the state as a live stock producing county and a live stock shipping county. We will also know how many carloads of cattle, for instance, are shipped out of a county, and how many are shipped in, which will give us the first index as to what the local production in that county is above what is brought in from the outside.

From the stockyards, all the larger stockyards in the country, we secured a monthly report for this same period, showing the state of origin of the receipts of the different classes of live stock by months, so that we will know at each one of these markets just how many of the different species each state has contributed. We are getting the same information from the concentration points which operate largely in Iowa and a few in Illinois, and a few, possibly, in other states. The same information from small packers the small Iowa packers and other packers elsewhere who buy live stock, and especially hogs, direct, which do not go through public stockyards markets.

When all this information is assembled, we are going to be able to tell just how many head of the various species of live stock have been marketed in each state during each month in the year, and during the year as a whole, and that is one kind of information that never has yet been available. I do not think that anyone has ever been able to even approximately guess the number of millions of head of live stock that have actually moved to market out of the state of Iowa within a year, or to what markets they have gone.

Mr. Doty has told you of the work of the Producers' commission firms at the markets, and Doctor Nourse has told you of the work that they have been doing, and Mr. Espe of the work they have been doing with regard to the local activities of co-operative shipping associations. It is evident to me that the great value of this work that they are doing is not going to be simply the possible saving of a few dollars a car in commissions at the other end of the line or possibly a saving of a few dollars in the possible excess profits that formerly went to the local live stock dealer at this end of the line; but it will be a building up some kind of an organization that can help in the more efficient marketing and the more orderly marketing of the country's live stock, and that was one of the important problems that was considered by the Live Stock Marketing Committee of Fifteen, and was the one that they had in mind when they drew up this plan of producer owned and operated selling agencies at these various yards.

But it is also evident to me that there is no possibility of bringing about a more orderly or a more efficient marketing of the live stock supplies unless you have some way of determining what those supplies are going to be, because if your orderly methods are not going to take hold until the stuff reaches the market, it seems to me you are going to miss the big chance of bringing about a better distribution. So it is in order to try to develop methods of determining what these supplies are going to be that this work is directed.

In the corn belt states our work has developed far enough at the present time so that we have undertaken to make an estimate of the number of cattle and the number of sheep that were on feed as of December 1 of this year. Those estimates were released for publication, the one on cattle yesterday, I think, and the one on sheep was to be released today. You may be interested in knowing what those estimates were. The estimate with regard to the probable number of cattle on feed as of December 1, this year, as compared with December 1 last year, is an apparent increase of 27 per cent. This estimate is based upon the known movement of stocker and feeder cattle and calves from forty-three public stockyards into each state for the four months from August 1 to December 1, and for the year to December 1, covering four years past, and the comparative movement of such cattle by months and years from sixty-seven markets since 1916; upon corn and forage supplies in each state;

upon personal investigations by state statisticians in each state, and upon replies made by feeders themselves to inquiries as to their own operations and neighboring situation.

Now that estimate of 27 per cent increase covers the corn belt as a whole, including eleven states, five east of the Mississippi river and six west. The situation is quite different in different states. For two states which are comparatively unimportant as feeding states there was an apparent decrease. In the rest of the states there was an apparent increase in all of them, which varied from about 50 per cent in Iowa to 25 per cent in Nebraska, South Dakota and Missouri, and 35 per cent in Illinois.

Now, as indicated there, we have a number of sources of information on which we undertook to base that estimate. There are certain figures that are available to us, and more and more figures and information of this kind will be available to us in the future. That is, we know the number of head of stocker and feeder cattle that are shipped out of each of forty-three markets, and these cover all the important markets of the country. We know into which states those stocker and feeder cattle go. But of course we don't know exactly the condition of those cattle as they go into those states, nor exactly the use that is being made of them after they have been received there.

We have more information than we have had before as to the character of the cattle. For example, we know—we have the figures from the Omaha market showing the weights of stocker and feeder cattle that are shipped out of that market into different states in five different weights—1,000 pounds, 800 to 900 pounds, 700 to 800 pounds, 700 pounds down not including calves, and calves, so we have a pretty good index as to the character of the cattle going out of Omaha. We have the same information from Chicago. We have other sources of information, but not so exact as that, on some of the other markets.

On the basis of that information, and information that we have received from feeders themselves in reply to questionnaires, it seems apparent that the cattle that are going from the markets this year are heavier than the ones that went out last year, and the estimate based on this information is that it seems that about 30 per cent of the cattle go into feed lots as of December 1, 30 per cent of them weighed 1,000 pounds and up, 32 per cent from 750 to 1,000 pounds, 20 per cent less than 750 pounds, but not including calves, and about 18 per cent of calves.

But while there seem to be more heavy cattle going into feed lots this year, there are also other sources of information that indicate there is probably a larger number of calves that will be fed out and won't go to market until late in the summer and on into the autumn. We also found that, according to the expressed intention of the feeders, 15 per cent of the number of these cattle would be marketed in December, 14 per cent in January, 12 per cent in February, 13 per cent in March, 11 per cent in April, 16 per cent in May, and 19 per cent some time after June 1.

That brings me, then, to the problem we are up against in getting enough information as to the intentions of feeders themselves to be able to know fairly definitely as to what is this situation as to intended marketing. As a matter of fact, I think cattle feeders are apt to be rather reticent in giving very much information as to their business, perhaps more so than men in other lines of business. I think the experience from this first questionnaire has been that the sheep feeders were much more willing to tell what they were doing than the cattle feeders were, and that we got a much larger percentage of replies from sheep feeders than we did from cattle feeders. But we have not yet been able to build up as large a list and as dependable a list of feeders in these various states as we intend to develop as fast as we can get hold of the men whom we can depend upon to furnish us with the information.

That is the problem. That is up to men such as you are to help us out. Unless we can get information direct from the men who are engaged in the business that will tell us what the situation is, why we are not going to be able to give back to you as dependable information and as much information as we would like to.

I might explain to you some of the reasons of the questions that are contained in these questionnaires and the use that we make of them. The first five questions relate to the individual's own farm. Number of cattle on feed December 1, 1921 (last year), and the number of cattle on feed December 1, 1922 (this year). Those two questions would enable us, if we could get enough replies from individual feeders that would be fairly representative of the industry, would throw considerable light as to the comparative number of cattle on feed on that date last year and on that date this year.

Then follow questions as to the weights of cattle going into the feed lot divided into four classes: 1,000 pounds and up, 750 to 1,000 pounds, 750 pounds down, and feeder calves. The reason for those questions was to find out what was the character of the cattle, and whether they were heavier or lighter, and such information as that would throw light on the probable time that the supply would move to market. And the next question had to do with the time when—the months in which it was intended to be ready for market, December, January, February, March, April and May.

The next question asked the total number of grain finished cattle marketed by you during the twelve months from December 1, 1921, to December 1, 1922. The reason of that question was so that we might know whether the feeders who were replying to these questions were large feeders or small feeders, or what you might call medium sized feeders. That is, if the great bulk of them were large feeders or the great bulk of them were small feeders, it would be fairly evident whether they were entirely representative of the feeding industry; and we also wanted to know which class of feeders we could depend upon to get out best replies.

The next question was the total number marketed during the last twelve months; how many were raised on your farm, how many were bought at the public stockyards, and how many were bought and shipped direct from the range. We desired that information because we have not any present source of information as to what is the proportional part in the number of cattle that are fed for the market of those that are locally raised and those that are shipped in. If we could get enough replies from the feeders in this state on that one question it would throw a great deal of light on the feeding situation here. If we knew that 50 per cent of the cattle that were fed were locally raised, or 40 per cent, or 30 per cent; or, on the other hand, that 50 per cent, or 60 per cent, or 70 per cent were bought at the markets or shipped in, and we know then what are the actual numbers of cattle shipped in, and with that as a basis we hope to be able to work out numerically the number of cattle that are actually on feed. As you will notice in this estimate, it is all on a percentage basis. We have not undertaken to try to give the actual numbers because at the present time we have not sufficient information to undertake to do that.

Then following those questions as to the individual's own activities are two questions which relate simply to the locality. First, how does the number of cattle on feed in your locality, December 1, compare with the number on December 1, last year? Let 100 per cent represent last year. Second, how does the number of farmers feeding cattle this year compare with the number who fed cattle last year? Of course those are questions that are on a percentage basis, or estimates of the various recorders which we would like to get as check-up questions along with the other information that we are able to secure.

If we could send out in this state say five or six thousand questionnaires, over the state as a whole, which would be probably fifty or sixty to a county, and could get back 20 or 25 per cent of replies proportionately distributed as to counties as the questionnaires were sent out, I think we would have a pretty fair sample of the feeding industry as it is conducted in the state at the present time, and that is what we hope to do, and that is what we want you men to help us to do. If the farmers themselves are not willing to give us this kind of information, it is going to be very difficult if not impossible for us to give you the kind of information that you would like to have and we would like to be able to give you.

So I would like to urge upon you men who are present to the extent that you receive these questionnaires yourself and to the extent that you can influence your neighbors, to do all you can to make it possible for us to get back this percentage of replies. I know that there is a prejudice on the part of farmers and cattle feeders toward furnishing information of this kind. I think that in the live stock work it will be met with more than in the crop work. I know that there seems to be a feeling on the part of a good many live stock men that information of this kind won't be of any value to them, or if it will be valuable to them it will be more valuable to the packing interests or some other interests who are perhaps organized to take advantage of it while they are not. Personally, I do not believe this. I believe that this information is of more value to the farmers, stock growers and feeders than it is to any other factor in the industry.

I think if you are going to improve your methods of marketing, if you are going to put your feeding business on a sounder basis, that this is the information that you have got to have, and I do not hesitate myself to urge upon every feeder to do everything he can to help us along in this activity.

With regard to the report as to the number of sheep and lambs on feed, I can say there is apparently 20 per cent more lambs on feed this year than December 1 of last year; that there is apparently 10 per cent increase in the corn belt and an increase of 25 per cent in the west, the irrigated region, which includes Colorado, western Nebraska, Utah, Nevada, Idaho and a few in Wyoming and Montana. This works it out to about 120 per cent for the country as a whole.

Now it seems that from this estimate there is hovering over the market a considerably larger supply of meat animals than were available at this time last year, or would probably be available in the next six months above what there were available in the same time last year. What is going to be the effect of this apparent increased supply? I am going rather out of my line when I undertake to express an opinion as to that. I would, however, like to give you just a few figures that I have here, which may be of some encouragement to you men who are engaged in producing this extra supply of meat animals.

Along with this apparent increase of cattle and sheep, as I think you all know, there is an apparent increase, a considerable increase, in hog production, and in the number of hogs that will be available for market in the next eight or nine months. So that it seems that somewhere and somehow we are going to have a very large supply of meat to go into consumption during the next six months or the next nine months. What are the chances that this can be taken and consumed and prices paid for it that will be at all remunerative to the men who have been producing it? I think the most favorable aspect in the situation is the enormous consumption of meat that is taking place in this country at the present time, and has taken place during the last six months.

I think if anybody would have known eight or nine months ago that the supply of hogs and the supply of cattle going on the market were going to be slaughtered and consumed in the months following—had known of that supply—that they would have been almost certain that the prices that were prevailing could not have been obtained for them. More than that, the supplies of finished cattle and fat cattle at Chicago during the past six months have been much larger than they have been in the same period at least for the past four years, and instead of being sold on a falling market have advanced almost continuously up till the present time, which shows that there is an enormous consumption or demand for a pretty good grade of beef in this country.

When we come to pork consumption, for the hog crop year ending November 1 this year, the reports of the inspectors of slaughter show a slaughter of 40,795,000, which has only been exceeded in numbers two years in the history of the industry. That was the crop year of 1918-1919 and 1915-1916, when there were 43,600,000 in the former and 42,200,000 in the latter. When it comes to pork production, the pork production this year, because of the greatly increased weight of the hogs that were marketed, has amounted to almost as much as the production in the year when there were 43,600,000 hogs slaughtered, simply less than 40,000,000 pounds of pork than in that year. But whereas in 1918-1919, out of the

7,116,000,000 pounds of pork produced, 2,690,000,000 pounds were exported, this year only about 1,500,000,000 pounds were exported, leaving a domestic consumption of about 5,500,000,000 pounds of pork, which is by long odds the largest domestic consumption of pork this country has ever seen.

It seems to me that if, with the industrial conditions that were prevailing a year ago, and that prevailed pretty generally up into the spring, we could consume that amount of pork and the amount of beef that has also been produced during that time, that with the improved industrial conditions that we have at the present time that there is a fair probability that we can consume the apparent excess supply at something like the same prices that were paid for the supply last year. Now that is simply my own opinion. I haven't any numercial basis for that opinion except the condition of the two markets at the present time, and the way that both beef and pork are going into consumption at the present time.

In order to make that possible, it seems to me that it is going to be up to the producers to exercise a little restraint in marketing both hogs and cattle. We have got rather a peculiar situation at this time where corn has gone up and cattle are coming down, and hogs at least are not going up any, and the margin of profit in feeding corn is becoming narrower and narrower all the time, so that the apparent incentive is going to be, as soon as this margin tends to disappear, for everybody who has cattle or hogs to sell to rush them onto the market. That, I think, will be a rather disastrous policy for this coming winter. If these expressed intentions of the cattle feeders as I gave them, their various percentages that they expect to market during the next few months, could be carried out, I think that that would be as good a distribution of the cattle that are now on feed as could be carried out.

But if, instead of that, instead of having 14 per cent, or 13 or 12 per cent, going to market in the next three months, you increase that 5 per cent in each month, it looks to me as though it is going to hit the cattle market and the beef market a pretty hard blow. Whether there is any practical way that the cattle feeders can agree to carry out a program of that kind, I am rather doubtful, but I simply wanted to indicate that if that program is carried out, it is going to be better for the individual feeders and for all feeders, than if you allow this pressure of the increased price of corn to force these cattle and these hogs onto this winter market in excessive numbers.

President Sykes: Mr. Horlacher wants to announce the committee on resolutions for the Shippers.

President Horlacher: As was suggested before lunch that we appoint a committee to meet the Meat Producers' committee, I appoint at this time C. G. Jensen, of Laurens; James Gordon, of Dougherty, and A. J. Rawson, of Clear Lake.

President Sykes: We stand adjourned, each organization to meet at 9:30 in their respective places in the morning.

THE BANQUET

Savery Hotel, Wednesday Evening, December 30, 1922

The President: Ladies and Gentlemen and Friends—We have again met under these very pleasant surroundings to celebrate our annual banquet gathering, and as president of the Corn Belt Meat Producers' Association I want to express to you our most hearty appreciation of your presence with us on this occasion, both the ladies and the gentlemen—especially the ladies.

This, I think, to most of us is what we might term a happy occasion, or sort of celebration or love feast. I well recall the first one of these banquets we held over here in the old Savery banquet room when the old Savery building was standing here; and Secretary Wallace and myself, as we discussed the proposition in advance of the venture in regard to holding a banquet in connection with our annual meeting, were sort of skeptical as to whether it was the thing to do or not. But after the first banquet we did not have any more skepticism or doubts as to the success of it, because every one seems to get better and with a larger interest and more in attendance.

Aside from the splendid dinner that you have partaken of, which we know you have all enjoyed, we hope that you will enjoy the other feature of this banquet that will be served to you from this on, and we know you will. Somehow we have been exceedingly fortunate this year in being able to practically fill our places and our program with speakers, with the exception of one disappointment that we have had just since we met in this banquet room. I announced to you during the session that our program was full, that all of the speakers would be in attendance, but unfortunately the railroads have tied up one of them and he will not be able to be with us.

I sort of feel at home among you people. I almost feel out of place—that is the truth of the matter—I have stood up before you so often and so many times in the past, and you know when I turn to my right and look on our honored guest tonight I really can hardly realize that we have with us a member of the president's cabinet, who used to sit here at the table with us as the secretary of our organization.

It just seems to me somehow—and you will pardon me for these remarks—that I ought to turn to him as the secretary of the Corn Belt Meat Producers' Association and confer with him as such instead of as Secretary of Agriculture of this great nation. It just seems as though I can hardly realize the change that has taken place in the brief space of time.

I am going to tell a little story on the Secretary. I had associated with the Secretary for so long that really I thought he had almost an infallible judgment in selecting men for any place; that he knew men so well that he could not make a mistake. But somehow, I confess, I got jolted along that line last summer when I was down in Washington one time. Mr. Cunningham and I happened to be down there on some business and of course we wanted to see the Secretary. He pretended that he wanted to see us, and I guess he did. So he invited us to his home one evening and we had a nice visit and just about the time we were taking our leave he said, "Boys, wouldn't you like to take a ride over the city tomorrow?" That was Sunday. I don't know, the Secretary used to go to church out here on Cottage Grove when I used to live in Des Moines. I don't know whether he does in Washington or not. But he really asked us to take a drive over the city of Washington that Sunday morning, and of course we were glad to accept the invitation. He said, "I will send my car around for you to the hotel and will pick you up in the morning at about such and such a time."

So, sure enough, here came the Secretary's car and the chauffeur called us up and we came down, and the Secretary wasn't there. Of course we inquired where the Secretary was and the chauffeur said that he wanted to see us a few minutes over at his office. So we proceeded to drive over to the office and were there informed that he had an important matter to take up with one of his bureau chiefs and that he was trying to get hold of him on the phone; it was a matter that he had to look after at once, and that he would just turn us over to the chauffeur and he would give us the drive, as he would have to wait there at the office. So he did so. He told the chauffeur some of the points that he wanted him to take us around to, and among other places was the old Soldiers' Home. Of course we were very much pleased.

By the way, the chauffeur was a colored gentleman, a splendid fellow, too, a high class chap, and he could drive an automobile. He drove us around and he pointed out the various places of interest to us, and we came to the Old Soldiers' Home and he was telling us of this and that, and in regard to what had happened there and who was there, and all those things. And he drove down a certain street or lane through a sort of a farm or pasture, and there was a fine herd of dairy cows just off to our right.

As we got just opposite those dairy cows the chauffeur stopped the automobile and said, ''Now, heah, gentlemen, heah is the finest herd of Jersey cows in the United States.'' Well, the fact was every one of those Jersey cows was just as spotted as it could be.

Well, it was pretty difficult for Mr. Cunningham and me to keep straight faces under those conditions, but we did manage to. Well, I think the Secretary will have to post his chauffeur when he goes out to show these Iowa farmers Jersey cows after this. You cannot fool them that way. You cannot fool Iowa farmers on a Jersey cow, if she is spotted.

Without taking more of your time I am going to introduce to you our old secretary, Hon. H. C. Wallace, now Secretary of Agriculture.

ADDRESS OF HON. HENRY C. WALLACE

(SECRETARY OF AGRICULTURE)

Ladies and Gentlemen, and Fellow Members of the Corn Belt Meat Producers' Association (I hope you have not discharged me from being a member yet):

I haven't any special talk to make to you. I think I told you when I was here last year that the very thought of trying to prepare an address to the Corn Belt Meat Producers' Association was repugnant to me. I never did try to prepare an address, and it seems just like preparing an address for your own family. I feel I am still one of the members of this association. When I look about here tonight and see men scattered here and there through the room who were in at the very first meetings and who have attended almost every meeting since, it makes me feel just like getting back among my own people again. I know this past year has been a hard one for you. I suppose at times you and a great many other farmers in the United States have felt that the folks down at Washington had rather forgotten all about you. Well, we have not.

I suppose I hear from more farmers than any other man in the United States. From two thousand to as many as five thousand letters a day come into that department. A great many of them are in the nature—not a large percentage of that number, but quite a number of letters every week are in the nature of personal letters that come to me from farmers or from farmers' wives, farmers' daughters and farmers' sons, telling me of their own peculiar troubles, personal troubles, and some of them are heart breaking letters.

I remember one, for example. We loaned some two million dollars last year and a million and half this year to the farmers in the northwest, in Montana and Dakota, mostly, and in a number of those other states where they had had failures of the wheat crop. That is almost a single crop country. We made loans each year to between 12,000 and 14,000 individual farmers for the purpose of buying seed, and then in the fall when the crop came on this year—they had a good crop out there this year, and we sent out our men and set up our organization to collect those loans; wherever a man had a crop so that he could afford to pay, we asked him to pay, because it was a loan and not a gift. Where he did not have a crop we extended it another year unless somebody else was going to come in there and take his money, and in that case we thought Uncle Sam ought to have it.

Well, the reports from some of those men were not pleasant reading. For example, he wrote of one family that I remember particularly, where the banker was pressing for the last cent, and he had a mortgage on everything, including the one cow that he had left. And they took everything, and then the banker went out to take that cow, sent two men out, rather, to take that cow. And that farm woman got out the shotgun and, with two children holding to her skirts, she served notice on them that if they touched that cow they would not be able to get the cow very far, and that they were more likely to stay there than the cow was to leave the farm—and they went away and left the cow. You know, I don't know any task I would more dislike to go up against than undertake to take the last cow from a woman who had two children clinging to her skirts and a shotgun in her hand. I would about as lief tackle a grizzly bear as to go under conditions of that kind.

But you people here in Iowa have no appreciation, I think, of the real downright hardship and poverty that has been experienced by some of the people in the northwest and in the southwest, where their dependence is one cash crop and where they, as in the northwest, have had a series of three practically entire crop failure years.

You know when I wakened this morning and looked out on Iowa and Iowa corn fields and saw the Iowa homes, I thought what a blessed thing it is to live in a state where the rainfall comes, sometimes varying in amount, but always enough to make a crop, and where social conditions are so much better than in some of the country in the United States the opportunities for the young, the contacts with good neighbors—I thought what a blessed thing it is to live in a state of this sort.

I know you have had difficulties here. I know it very well. I know that a great many people have had to quit. Possibly others will have to. But when you look back and compare our conditions here now with conditions a year ago or a year and a half ago, we have made tremendous progress. Prices of Iowa farm products are not where they ought to be in comparison with the things we have to buy in comparison with the prices of other things, but Iowa has been blessed with big crops this year and prices have advanced from 50 to almost 100 per cent in some cases, and you can see the way out. And, as I say, you are infinitely better off than in some of the country through the northwest and the southwest where not only have prices not advanced as much because of the higher freight rate they must pay, but where crops have been short and where they are having real hardships to go through this year.

Now, I spoke to you, I think, last year about what we have been trying to do in Washington in the way of legislation, and I am not sure but most of the legislation that was passed was before that time. I think I spoke of the revival of the War Finance Corporation, of the extension of the increase in capital of the Farm Land banks, which made it possible for them to function more efficiently. At the present time the Farm Land banks are lending about a million dollars a day on farm loans. The law which recognizes the rights of farmers to organize for co-operative selling of their commodities and which protects them against prosecution at the hands of some over-zealous official has very greatly encouraged co-operative marketing organizations.

Last week there was a meeting in Washington, a really wonderful meeting, composed of representatives from the various commodity marketing organizations. I don't know when I have looked into the faces of a more vigorous, intelligent and capable group of marketing men than I did last week when I spoke to them for a few minutes. Out of that meeting I understand is to come a national council of co-operative commodity organizations, and I think their plan is that they will have representatives there in Washington to look after the interests of organizations of that particular type.

Those commodity organizations, you understand, are a little different from the organizations we have here in the middle west. They organize, for example, the tobacco growers and cotton growers and peanut growers, and all down the line of commodities, the raisin growers and prune growers, and so on, and the members bind themselves for five years to hand over the control of that crop to the organization. It enables an organization of that kind to deal with the economics of marketing as well as the mechanics of it.

There is a good deal to be saved through co-operative marketing organizations in the mere mechanics of the marketing. You people here have been making very material savings for many years past, the people of Iowa the co-operative elevator companies, the creameries and others, and you people more lately in the live stock marketing associations. But your savings have been the savings in the actual process of marketing. Now your commodity organization goes farther than that. It is able to exercise a considerable amount of control as to the time of marketing, to stabilize the marketing, to feed the crop out as the demand for it exists, a fair price. That is what I mean by the economics of marketing. And the savings in the mechanics of marketing as compared with the benefits which come to us through, in a measure, price control, in the economics of marketing, is very much greater in the latter than in the former case.

Where you have a country of diversified farming such as we have it is very much more difficult to organize on that basis, but in so far as that plan can be carried out in a thoroughly practical way I look for considerable benefits to come wholly aside from the mere saving in the practical marketing operations.

The packer and stockyards law, which was enacted last year, and I think which I spoke to you of last year, was finally declared constitutional by the supreme court, and is now in full force. We have resident supervisors at all of the principal live stock markets. At such markets as Chicago, Kansas City, Omaha, St. Joseph, Sioux City, Indianauolis, Fort Worth—all of those larger markets—we have a resident supervisor, a representative of the Department of Agriculture, who has been selected with care as to his previous qualifications and as to his fair-mindedness, decision of character and tactfulness, a man to whom any of you can go with any complaint which may arise in the process of marketing your stock there and who will give it immediate attention if it is the sort of complaint that can be handled on the spot. We have not said very much about the results which have been accomplished by that organization, but those of you who have come in contact with it know some of them. We have been able to bring about a great many reforms in the live stock markets. We have been able, I think, to show that the old practice of boycotting the co-operative or the individual shipper has got to be stopped. We had one round on that at St. Louis, and I think the matter has been settled. Now and then there will be some friction come up, but people have learned that the law does have teeth in it. At the time that law was passed, I remember it was rather a common remark that the amendments had taken the teeth out of the law. Well, I want to say to you, as I have said many other times, that that law carries all the authority that any one man ought to exercise, I do not care how fair-minded he is or how able he may be. It carrier all the authority that any one man ought to exercise over packers, stockyards companies and live stock commission merchants, and as time goes on I think you will agree with me that as the organization becomes more perfected, men become more skilled in working in the discharge of their duties, I think you will agree with me that that law will prove to be of tremendous benefit to the live stock industry.

Someone asked me about the proposed packing merger under that law and wanted me to say something about it. I can not say much about that that has not been said. One packer proposes to buy out another. There is nothing in the law that specifically prohibits or forbids one packer from buying out another. The law does give authority to put a stop to anything which is in the nature of a monopoly or which has a tendency toward monopoly, or which unreasonably restricts competition. The law does not contemplate giving approval in advance to any transaction of the sort proposed. The law does give authority to make a most complete inquiry into the effect of that transaction. What will be done about that will depend altogether on how the matter is presented and when. Up to the present time there has been no formal application, and therefore no action has been called for. That is about all I can say about it.

We have conducted very considerable investigations as to the possible effect. It is not an easy thing to determine what the effect will be. Some may argue that that would result in increasing competition because of the increased strength which comes from the bringing of two concerns together and the economies which will result from that. Others argue that it will restrict competition because it will take one set of buyers out of the market. I suppose there are good arguments to be made on both sides. It is one of the times when I would just as lief the law did not have quite as much authority as it has, at least while I am there to administer it.

One piece of legislation which has been very generally desired by farmers for twenty years past or more is the matter of intermediate farm credits. That matter is now being considered by the committees in the senate. There are three measures proposed. One of them is to increase the limit which the Federal Farm Land Bank may lend to any individual, from $10,000 to $25,000. Evidently that will go through without much difficulty. Everybody now—almost everybody—seems to be for it.

Another is the federal authorization of live stock loan companies, calling for no money from the government, but a sort of live stock loan company after the manner of some which have been carried on for many years past, but this under federal authority. Evidently that will be passed.

The third law calls for an addition to the Federal Farm Land Bank system, appropriating $5,000,000 of government money as capital stock for each of the district Federal Farm Land Banks, twelve of them in all, and setting up in those banks the machinery for rediscounting farm paper, taking it from the local banks, something after the manner in which the War Finance Corporation has been doing its work, and the money, in addition to the capital, which is to be used for discounting that farm paper and making loans, to be raised through the sale of bonds, debenture bonds, after the manner in which the Farm Land Bank system raises its money for making a mortgage loan. I understand that the committee, which has been holding hearings on that question, will be ready to report within a week or ten days, and the probability is that that will be reported favorably. It also has the support, I think, of the vast majority in both the house and senate. It was one of the matters treated by the president in his recent message to congress. It has his full support. It has the support of other members of the administration and of not only the farm bloc group but the conservative group as well. So I think it is reasonable to expect that within the next sixty days, or before congress adjourns, there will be legislation along the line of farm credits that will adequately meet the needs of the farmers, whether in the corn belt, in the southern states or in the range country of the west.

Just a word about what we have tried to do in the Department of Agriculture. We have been giving especial attention during the past year and a half to the economic side of the work of the Department, strengthening that as rapidly as we could. Congress has been very good to us. They gave us last year, for example, $70,000 increased funds for the year, to be used almost altogether in strengthening our live stock estimates. The live stock estimates of the Department have never been entirely satisfactory, not the fault of the Department but because of lack of money. We had only $20,000 to $25,000 for making the estimates on the live stock of the United States, and it was impossible to get satisfactory results. We are building up an organization now through which we hope to be able to tell you with some assurance how many cattle, how many hogs and how many sheep there are in the country, at least twice a year. And we hope to be able, after a time, to go even farther than that and keep a sort of balance sheet on feeding cattle, cattle that are being fed, so that you may have statistics that will be really dependable statistics and that you can take as a pretty fair guide in your feeding operations. It is going to take time to do that. It is no easy thing to get the sort of live stock estimates that you yourself feel are reliable estimates. This is a great big machine that has got to be built up.

It is a very different problem to get estimates in Iowa, for example, and estimates in one of the western states, such as Colorado or Texas, or any of those states in that great breeding ground, because there you can not do it by mail so well as you can here. We are putting special men out to cover these areas in the west, to get acquainted with conditions, so that these men will make personal reports, and we are trying to strengthen that work in every way so that you can depend upon our live stock estimates.

The grain estimates have always, or for many years, have been looked upon as very desirable. We hope to make the live stock estimates equally reliable.

We are strengthening our marketing work. We have men overseas trying to size up the possible future demand for agricultural products. We have men in the south trying to size up the production in those countries which compete with us. In other words, we are trying to build up a machine there that will give any of you exactly the sort of information you would most like to have if you owned all of the farms of the United States and were trying to put them on a profitable basis. That is the angle from which we are approaching the end, trying to get and present to you just the sort of information that any thoroughly competent, intelligent business man would want if he owned the whole business and was trying to make money at it.

No one can forecast with any accuracy how long it will take to build up a machine of that kind that functions 100 per cent. In fact, I do not think we ever will get that sort of a machine to function 100 per cent. But we are going to come a whole lot nearer to it than we ever have in times past.

There has been one development of the past year that is very significant to me. You know in times past, even before the war, beginning back along in 1900, the business men of the cities were beginning to take an increased interest in agricultural matters. We had the corn trains and the dairy trains, and all sorts of movements coming out of the cities, a sort of benevolent, paternalistic attitude to help the farmer produce more. It was because prices of farm products were gradully increasing.

Well, business men today are very much more keenly interested in agriculture and are very much more sympathetic toward the condition of the farmers than they ever were in all the history of the country. This time it is not because of any paternalistic attitude but it is because they have come to realize through the experiences of the past two years the truth of the saying that a prosperous business depends upon a prosperous agriculture. You know in times past we have been in the habit of saying that the farmer is the backbone of the nation, and that the farmer is the foundation upon which our nation is built, and that we must have farm prosperity if we are going to have business prosperity, things of that sort. But we said them a good deal as many of us say our prayers, without fully realizing what the words meant.

Now, bankers, railroad men, manufacturers, business men of all kinds, appreciate fully the truth of the sentiment carried in expressions of that sort. We had, for example, the business men of the northwest who are tremendously concerned over that northwest situation come to us and say: "We want to help here. Tell us what to do. We will stand behind you in anything you want to do out there. Come out and size up that situation. Show us where we can help. Everybody will get behind it." That is true everywhere, true in the south, true all over the country. There is a thoroughly sympathetic attitude on the part of big business of all sorts toward agriculture, and it is a very hopeful thing. It is going to result in bringing us together as a nation. It is going to put a stop to a lot of this class prejudice which so often develops into class hatred. We have come to see that if we are going to build a thoroughly well-rounded, self-sustaining nation, it has to be by co-operation of the various large groups in the nation instead of by quarreling between each other. And if through this depression we have come through, and let me say to you that business has suffered as well as agriculture; if through this terrible depression, out of it comes that sort of spirit, that consideration for one another, that sympathetic understanding of one another's troubles that willingness to co-operate for the good of all, if that sort of spirit comes out of it, it will not have been wholly bad—bad as it has been.

Mr. Thorne suggested that I talk to you a little about some of the things that happened in Washington. I think I did that last year some. We are coming now to the New Year's, and perhaps you would be interested in how New Year's is celebrated in Washington, or observed. That is the time when the president and his wife always hold a great reception. I remember our experience last year, the first one for us.

At eleven o'clock the members of the cabinet and their wives go down to the White House and pay their respects, or 11:30, to the president and his wife, and at twelve o'clock the president and his wife take a position in the Blue Room there, and the doors are opened and everybody who wants to come and shake hands with the president and his wife is free to come. They told us very kindly that after the first half hour the members of the cabinet and our wives were free to go when we pleased. We just stood around for a little while and watched the crowd. We left about one o'clock. I took Mrs. Wallace home, and I went back to the office and worked. I left the office at five o'clock, and when I drove up past the White House, the crowd extended from the front door of the White House two abreast, out through the White House grounds, across in front of the State, War and Navy building, which is a long block, and down the side of the State, War and Navy building for a distance of about two blocks. And that crowd had been going, with the exception of twenty minutes at noon, there had been that steady procession from twelve o'clock noon until almost six o'clock that night. They stopped people forming the line, I think, about five o'clock or a little before. They did not allow any others to get in line, but the president and Mrs. Harding stood and shook hands with all of those who were in line up to that time.

Now you can understand something of the physical strain on the president and his wife to do that sort of thing, to stand there and shake hands with that continuous string of people. You know they found one rather interesting thing. They got to timing the number of people that passed in a minute, and then they found that if they speeded up the band, if they played a lively march, I think it was increased some 25 per cent. So they speeded up the band.

I remember a good many years ago of attending a reception when Roosevelt was president. Mr. Ingham, whom I see in the audience, was there at the same time. This was an evening reception and at that time the president and his wife, and then the wives of the various cabinet members, stood in line. That practice is not followed now—only the president and his wife. Well, after shaking hands with the supreme court and the admirals of the navy and the generals of the army and some of the other dignitaries, Mrs. Roosevelt reached back and got a great bouquet—oh, it was this big around (indicating). She held that directly in front or her in both hands, and it was amusing to see the folks. We were standing just opposite the line. When they came in they shook hands with the president. Roosevelt shook hands with everybody and gave them that firm grip. Then they turned to Mrs. Roosevelt, who smiled sweetly and held that big bouquet in front of her, and that so rattled about half of them that they just stumbled away down the rest of the line and out of the door.

Mrs. Harding, I think, shook hands with every one. Perhaps that is one of the reasons why she had such a serious breakdown and we all feared for her life for a long time. I am glad to say that she is very much improved. I was down Thanksgiving Day. By the way, it was on this matter of credits. We had a conference Thanksgiving afternoon and finally agreed as to the credit measure at that time. I saw her then for the first time since she had been sick, looking very well, still very weak. It is evident that she is not going to be able to hold a New Year's reception this year, or any other reception for some time, but she is well on the road to improvement.

I had a rather interesting experience at a reception—last spring, I think it was. I was standing around waiting for the time to go home, when the French ambassador, a very interesting man, one of the most interesting men of Washington, Jusserand—he was there when Roosevelt was president. I remember a story they told me. Roosevelt was in the habit of taking people out on long hikes, and they came back rather bedraggled, some of them very much used up by it. Among others he took one day was Jusserand, a man not as tall as I am, or not any taller, but a wiry fellow, a fellow who could not be worn out very easily. They came to the Potomac. Roosevelt began taking off his clothes to swim the Potomac, whereupon Jusserand did the same thing. Just as they were about to get in, Roosevelt noticed that Jusserand had on his gloves. He said: "You are not going to swim with those on?" "Yes, I think I had better. We may meet some ladies on the other side."

Well, this evening last spring, at one of these receptions, Jusserand came over and said: "Mr. Secretary, I notice in the paper that some sheep sold at one of your great markets for only 35 cents a head." I said: "Yes, Mr. Ambassador, that is true." He said: "I go to the New Willard and I pay 75 cents for one mutton chop. I think I shall buy two sheep." "Well," I said, "I would like to see somebody try that, Mr. Ambassador, and I think you could get away with it perhaps."

I don't know whether I told you I think the most interesting experience I ever had. Did I tell you about going down to the Battle of the Wilderness last year? They had the Marines out on that great Wilderness battleground, about fifty or sixty miles southwest of Washington, and they repeated so far as they could some of the maneuvers of one day's battle there. And the president and Mrs. Harding and Secretary Denby and some others were going down to spend the day, going down in the afternoon and spend the next day and see some of those maneuvers; and the president invited me to ride with him and Mrs. Harding and Secretary Denby and spend the night down there in camp.

We drove down in the motor car. When we came to the confines of the camp, there was the Marine Band, and we stopped, and there was the flag on the staff—we stopped and the Marine Band played the national anthem and we all stood at salute. Now to get to the headquarters of the camp we had to drive around three sides of a section. We had to drive down, across and up to get to the headquarters; and after the national anthem had been played and the ceremonies there were finished, we drove down that line. It was the most impressive drive in all my life. The entire distance of that three miles was lined with Marines, I should judge about twenty feet apart, just silent figures standing there at salute—not a word said. We drove rather slowly, but I think—I know —I will never to my dying day forget the impression that made on me, that silent row of figures on either side for that three-mile drive, the majesty of the American people represented there in those men as a tribute to the head of the nation.

It was a wonderful night and a wonderful day the next day. We went down to the movies that night. They had movies in a natural amphitheater where all the boys came, and they ran the thing. It was an "at ease" hour. If they didn't like the movie, they said so, or if they wanted to sing they said, "Stop the movies!" and they sang. They ran the thing as they pleased. Just as we were about to disperse, a Catholic chaplain said he would have mass there at 6:30 the next morning. I had a curiosity to see mass in a soldiers' camp.

It was a chilly morning. We nearly froze in those tents they had there. It was an awfully chilly morning, but I got up and went down at 6:30, and the only man there was the chaplain. I waited around a bit and nobody appeared, and I saw up one side of the valley the campfires. So I thought I would stroll up that way. This was about half a mile from headquarters where I was. I strolled up that way and there the boys were gathered around the fires and they were cooking breakfast, and I stopped at one place and they asked me to eat breakfast, and I did—a very good breakfast. I said: "I didn't see many of you down to mass." "No," one of these boys said, "if the Padre had built a fire down there such as we have here, we would have been there all right."

There are a lot of those interesting experiences there, and there is a lot of hard work. I was saying to Mrs. Wallace the other day that when the time came for us to come back I thought I would stay for two weeks and put in that time in a sight-seeing bus seeing Washington, for I have not seen much of it except back and forth from the house to the office, and really one should just take that much time there to see the tremendous number of interesting things that people, even those who go for a short time, do not see.

On every side are places of tremendous historic interest. In almost all of the public buildings are places where you can spend days with profit. It is an interesting thing, an interesting life in a way. You meet a great many interesting people from all over the world. But I want to say to you that when the time comes to come back here among whom I call real people, why I'll be mighty glad to come, and I am very sure Mrs. Wallace will be, too. This little experience I have each year of coming out and meeting with you and shaking hands with the men I have worked with and fought with and at times have bled with in certain battles that this association has carried on for so many years, this experience is really one of the bright spots in the year to me.

The President: Sixteen years ago in January of this coming year, as vice-president of this organization I received a letter from a young fellow in the eastern part of the state who had not been out of college very long, asking me if I would like to meet a young man that was a chum of his in Chicago some day and go over some matters with him that he thought were of vital importance to the state of Iowa and the Corn Belt Meat Producers' Association at that time. At that time Mr. Ames was president of the organization, but his time was taken up in Chicago as manager and president of the old co-operative that we were then operating, and I was sort of acting president of the association here in the state.

Well, this letter was signed by J. M. Brockway, and I thought the matter over and thought it would be a very good thing to go in there and meet this young fellow that Brockway suggested. I had met Brockway previous to this and was sort of favorably impressed with him, and I thought we ought to meet this young fellow and go over with Mr. Ames the matters that he had in mind. By the way, he said, "I am going to ship some cattle about such and such a time and I'll furnish this young fellow a pass. He can go in with me on the stock train and it won't cost the association very much." Well, of course those days we did not have much money to squander and that sort of appealed to me, so I wrote back to Jim and I said, "Bring him in. Let me know and I'll meet you."

So Jim set the date he was going to ship his cattle and notified me, and I went in and sure enough here at the office of the old co-operative I ran onto Jim Brockway with a tall, slim, young guy that Brockway had written me about. I came in and he said, ''Sykes, I want you to meet Mr. Thorne.'' Well, I looked him over, I just thought he was well named.

Well, I wanted to know, along with Mr. Ames, what this young fellow had in his noodle, and we soon found out. He said, ''Your freight rates out there in Iowa are in an awful shape. They are away too high. They are away out of line''—that is, live stock rates we were talking about—''they are clear out of line with the live stock rates prevailing in other states surrounding the state of Iowa for similar distance, for service rendered, and it seems to me there ought to be something done to correct these abuses and these inequalities.'' And we got so interested in the young man that we stayed over night. Mr. Ames took us out home and we went over the proposition quite thoroughly and we decided we would call the board together and have this young man meet with us.

So as soon as it could be arranged for, the board was called together in Chicago and this young man told the board what he had in his mind and showed them the inequalities of these intrastate rates as compared with intrastate rates in other states on live stock; and to make a long story short, the board authorized Clifford Thorne to file a complaint with the Iowa railroad commission at that time complaining against the inequalities in our intrastate rates; and out of that came our first victory.

Now, that has been almost sixteen years ago. This young man has developed into quite a character, a man of national reputation, I am glad to say, a man that even the railroad experts take off their hats to as a rate expert, as a man that knows something about railroad rate problems; and as usual on this happy occasion we have the pleasure of having with us Mr. Clifford Thorne, who has done so much for us in the past, for the state of Iowa, whom I take pleasure now in introducing to this audience.

ADDRESS BY CLIFFORD THORNE

Friends of the Corn Belt Association: It is a wonderfully thrilling experience to meet these faces again, to receive the magnificent reception that you tender when I come back to your annual functions. When I meet you out in the lobby and downstairs, it seems that I am meeting relatives, members of my family, to whom I am most devotedly attached.

Senator Cessna has fortunately given me a little poem and requested me to read it which gives quite a vivid picture of one of those trips on a stock train, and at this time I am going to read it. It is an original document, penned by one of the members of your organization, Mr. J. A. Pendry.

THE SHIPPER

The shipper sat in an old caboose,
Smoking his pipe of clay;
The glass was gone from the window sash,
And the cushions were taken away.
An old oil lamp on the wall nearby
Refused to burn, for the thing was dry.

This farmer placed his hand to his head
As he thought of a by-gone day,
When shippers were treated as gentlemen
By trainmen along the way.
And a teardrop came to the old man's eye—
Then he went for a drink, and the tank was dry.

The coal was gone, the fire was low,
And the chills began to creep
Up the twisted spine of the cattleman,
And of course he could not sleep.
So he sat on a switch and wrote this rhyme,
While the trainmen waited for overtime.

I did so want this little talk tonight to be one of my best, for many reasons that are going to be developed later. I worked and sweated over there at the Grant Club today, pen and ink to help me, and I am going to ask your kindness, your patience, your generosity tonight to help me a little bit. There are going to be portions that, for fear of misquotation, I shall read to you. I had intended to read all of it to you, the first time I think that I have ever appeared before this organization and ever requested indulgence of that character. I am not going to do that but there are certain parts which I must read for reasons which will appear.

My remarks may seem somewhat rambling and not connected. If I had had a day or two more on this speech of mine tonight, I could have made it in good order. There are going to be three general divisions. First, I want to speak very briefly about eight different things of rather large importance that have happened since I was with you last, two years ago. Second, I want to speak about some things with which I am more intimately connected. I shall talk in regard to those more at length. And, third, am going to give you a conclusion that will be a conclusion in more senses than one, a conclusion unique in and of itself.

In the past two years, 1921 and 1922, you have witnessed a very desperate struggle against tremendous odds on the part of American agriculture. You probably suffered more than during any other time in your lives, not because prices were lower but because of a disproportion in the prices, the price which you got for your products compared to the prices which you had to pay for the things you purchased. It is when things get out of a proper relationship that trouble comes. While you have suffered and while at times many of you have faced possible financial ruin, if not actual bankruptcy, please remember that you are not the only ones that have suffered. But we must not forget that in 1921 there were several hundred thousand railroad employes deprived of their daily means of livelihood while you had most of the necessities of life. We must not forget that there have been literally millions of people starving in Russia, in China, and other parts of the world, while you had most of the necessities of life. Nevertheless, you have suffered as never before.

You have been passing through a crisis, and it is during such periods as these when you should apply an acid test to things as they are and as they have been, to see if better methods can be devised for the future. During these past few years, you have had a hard struggle and things have gone wrong constantly, yet a few things have been accomplished. I want to list them once more—you have heard them before. Some of these I have had no connection with; others I have been somewhat intimately connected with. I will not deal in glittering generalities, but with specific, concrete facts.

First, during that period you have provided for the first time for the regulation and control by the federal government of the grain exchanges. Some have said the decision of the supreme court took the teeth out of that law. It did out of a large part of it, but don't forget that the Interstate Commerce act was interpreted by the supreme court of the United States as giving absolutely no power to the Interstate Commerce Commission to fix rates until eighteen years had passed by. Their decisions were largely advisory in character. Their investigations, however, and their conclusions were of tremendous moment and significance to the shippers and the railroads of the country, and laid the foundation for subsequent legislation and regulation that has been of tremendous import. Unsatisfactory as it finally is, I believe the enactment of the Capper-Tincher law to have been just as epoch-making in importance in the grain industry as was the enactment of the Interstate Commerce law in the railroad industry. And I know that the grain industry has needed some regulation.

We found, after somewhat extended investigation, that on the Chicago Board of Trade they sell more than fifty times as much grain annually as comes to the market. We found in that little wheat pit, about twenty feet in diameter, they sell three times as much wheat as is grown in the entire world. We found that they sell over 18,000,000,000 bushels of grain annually, which is never delivered. They never expect to deliver it. We found that that is literally the price-reflecting or price-determining agency of the grain industry of America. When an institution has become so strong and so powerful as that, it is time for some sort of regulation and control, because the power in a few hands is vast. As to whether the transactions on the Board of Trade are gambling or not, there is a lot of discussion. I am not going to indulge in that tonight. Suffice it to say, I believe the facts that I have related, the accuracy of which I have not heard questioned demonstrate and justify the enactment of such legislation. Has it occurred to you that the passage of that law has been during the administration of one of your former assistants in this organization?

Second, you have for the first time in the history of the United States enacted packer legislation seeking to control and regulate certain activities of the packing industry—another epoch-making event in American industry.

Third, you have helped in securing the first general reduction in freight rates that has ever been made in the history of American railroading, a reduction aggregating $400,000,000 in amount.

Fourth, you helped to secure the reopening of the Pittsburgh plus case before the Federal Trade Commission, that involves the whole structure of prices on steel, which is one of the basic commodities in our industrial life.

Fifth, you have witnessed the organization of an agricultural bloc in congress that has challenged the attention of the whole nation to the problems and needs of agriculture such as never existed before.

Sixth, you have helped in obtaining funds for the gathering of news concerning the agricultural industry in all parts of the world, such as other forms of business have obtained in the past.

Seventh, you helped to defeat the sales tax.

Eighth, you are now crystallizing the great co-operative and credit agencies which will aid the farmers in selling their products collectively in a more sane and businesslike way.

This is a day of organization. That is the great lesson that you must learn as a result of the experiences of the past few years. If it is right for those men who sell your grain to unite and fix the prices they shall charge for that service (and they have been sustained by the supreme court of the United States, by the way), if it is right for those who sell your live stock to do likewise in a certain degree, if it is right for the great steel companies to unite in one large company handling 50 per cent of the steel of the nation, if it is right for the railroads of America to unite in one great institution representing 90 per cent of the railroad mileage of the nation, then it is right for the farmers of America to unite in a few powerful institutions which will safeguard their interests.

The farmers have been trying to speak collectively during the past few years on several important questions. I am going to talk about one somewhat more extensively than I have these few propositions that I have just listed. On February 20, 1920—almost three years ago—I had the temerity to propose to this association a resolution condemning certain provisions in a railroad measure then being championed by a lifelong friend of mine, who at that time chanced to be the senior senator from Iowa, a man of commanding position nationally and the chairman of the senate committee on interstate commerce, probably the highest position on commerce matters in the United States.

Tonight I shall propose that you adopt a resolution condemning in equally positive and unqualified terms a position taken by the junior senator from Iowa.

The declaration you made in 1920 was in no uncertain terms. Listen to the closing paragraph concerning certain sections of the Cummins-Esch law. It won't take but just a few moments. I have the resolution here. I believe I will read more than the closing paragraph. I think this is especially appropriate in view of the fact that it seems to me in a dim recollection of the past that it has been repeated over this state that I have favored the Cummins-Esch law.

"Whereas, Congress is contemplating legislation which will have the effect of guaranteeing to the stockholders and bondholders of railroad securities a six per cent net return upon their book value or upon the cost of reproducing the railroads of the United States, which will entail increased passenger and freight rates that will produce a net revenue of more than $200,000,000 over and above the profits guaranteed during the war—"

Remember that said there "would have the effect of guaranteeing," we did not say "guaranteeing them." On that subject, just a word. What effect did it have? Was it helpless, meaning nothing, as some have stated? A few months afterwards there was a case pending before the Interstate Commerce Commission, involving the freight rates on live stock, and the Interstate Commerce Commission used that law as the controlling factor and declined to grant the reduction.

A few months after the enactment of this law, it was quoted in another decision in which the commission granted the most tremendous advance in freight rates that has ever been made in this or any other country since the steam engine was invented, and it was made at a time when everybody else in this nation was being forced to reduce their prices. Later, by the creation of a national sentiment, through this organization and other organization meeting from the Pacific to the Atlantic, by the passage of resolutions, by the making of speeches, and then by the trial of a case, we did succeed in persuading the commission to ignore the law and to grant a reduction which was not challenged. Let us proceed just a moment with these resolutions:
held directly responsible for the advanced rates which must follow; and

"And, Whereas, If this law is enacted, the present congress must be this congress must further be held directly responsible for a further advance in wages which will be the inevitable sequel, and all the other after-effects of such absurd legislation; and,

"Whereas, Congress should give as much consideration to the rights of the farmers of the United States as they give to the railroad security holders. There being a decrease in the wheat area under cultivation which has been estimated at 23 per cent, and a decrease in the number of brood sows because of the uncertainty in future after-the-war conditions, all of which will cause a substantial decline in the breadstuffs and meats of the nation which today and from time immemorial have been about as essential to the welfare of America as locomotives and cars; therefore, be it

"Resolved, That we ask our representatives in congress to immediately enact legislation dividing the country into farm zones or districts, and guaranteeing the farmers in the aggregate, in each zone or district for the period of two years from the effective date of the legislation, a net return of 5½ per cent profit, plus one-half per cent for new fences and barns; and that the said total of 6 per cent shall be above all taxes and above all cost of labor and supplies, and that it shall be computed upon the present cost of reproduction of the farms in said zones or districts in their present condition. Further, be it

"Resolved, That as an incident to the foregoing guarantee that congress shall also be requested to guarantee (1) that we won't have a drouth this summer, (2) that our sows will bring forth of their kind bountifully and plentifully, and (3) that our eggs will hatch, our hens will cackle and our roosters will crow.

"Seriously, we condemn in the most unqualified terms the provisions of the guarantee embraced in the legislation said to have been agreed upon by the joint conference committee having under consideration the pending railroad legislation. Such a rate of return is practically unknown to the farming industry as this committee is proposing for railroad security holders with the government guarantee back of it. There are literally billions of dollars in this country on deposit in savings banks, entrusted to insurance companies and invested in farms which yield a much lower net profit on present values and do not have any government guarantee back of them."

Gentlemen, in regard to that rate of return, just a word. It has been said that 5½ or 6 per cent is low. In Great Britain the parliament has fixed as the basis of the after-the-war returns the average that existed in 1913 just prior to their entrance into the war which was 4.27 per cent, and to that they have added 5 per cent on subsequent improvements. You have adopted 5½ to 6 per cent, and lately your commission has adopted 5¾ per cent. That per cent of 4.27 was what Britain has fixed as a return for their railroads as a basis of computing what is reasonable.

That may sound inadequate to some folks. You must divest your mind of the consideration of single companies. You are considering the average of all companies in an industry, the rich and the poor the great and the small, and the failures and the successes. And you must also remember that in most all business the bulk of them make failures. If you adopt a standard in the railroad industry that will enable a weakling to survive, you are treading close to a law that will compel the survival of the unfit, reversing a basic principle in economics that exists in all other lines of business activity.

As to whether that 5¾ per cent is adequate or not, do not answer this by the consideration of any one industry. When a man tells you that the railroad industry is only making about 4 per cent, or a little less, on the value of the property, please don't forget that the tentative value about which he is speaking is two billion dollars greater than the market value of all railroad stocks and bonds outstanding in the hands of the public. I said two billion dollars greater than the market value. I meant two billion dollars greater than the par value. The market value is about 75 cents on the dollar on an average in the country as a whole.

In conclusion, you stated:

"We believe that such legislation is economically, socially and politically unsound. Those who father such legislation must be held responsible for the results which will inevitably follow, in higher transportation costs, in higher wages, and in the establishment of a dangerous precedent. Such legislation should receive the condemnation of the farming industry of the entire nation."

What is the precedent that is wrong? Suppose we concede that it is not a guarantee. Shall you adopt a rule that compels a commission, if it observes the law, to make rates sufficient to produce a fixed rate of return regardless of changing commercial conditions affecting other industries? You can not fly in the face of the laws of commerce and society that affect all the rest of us.

These resolutions were unanimously approved by the Corn Belt Meat Producers' Association on that occasion. I believe that was the first declaration by any men or body of men on that subject in the state of Iowa. We did not stop there. We secured like action from a dozen other groups. Months before that we wrote the resolution condemning the law adopted at the National Shippers' Congress. Last January the agricultural interests in national convention, in the National Agricultural Conference, adopted resolutions of the same tenor. A friend of mine, Mr. Fullbright of Texas, succeeded in getting the National Industrial Traffic League, through their legislative committee to adopt a resolution condemning the same law.

I believe that it takes time for sentiment to crystallize on a new issue, but finally the time is ripe; and believe that favorable action will be taken by congress in the near future. I believe the Corn Belt Meat Producers' Association, which I am now addressing, deserves the credit for taking the lead in this movement which has finally spread throughout the nation. No men, no body of men, to my knoweldge, in the home state of the senior senator from Iowa took this stand before you led the way.

On that date you collectively made three prophecies and chanced your judgment. Those three prophecies have come true. You stated that the enactment of that law would be followed inevitably by a large and burdensome advance in freight rates. That came in due season. On August 26 of the same year came the largest advance in the history of the country. Second, you said this would also inspire and inevitably cause a heavy advance in wages, and this came at about the same time when all the rest of us had reduced our prices. Third, you said it would constitute a dangerous precedent.

This same thought—a paternalistic guarantee—of getting the whole of us to give something to a few of us, is rapidly permeating most of the industries of the nation. Each group seems to feel its own colossal importance to the rest of society and demands government help. Today, the ocean shipping industry is making the same demand. A few months ago, a large group of farmers were interested in the same thing. What will be the outcome of it all? Can we lift ourselves by our own bootstraps? Shall we all work for the government and get our livelihood from the government? Shall we all become past-masters of the gentle art of sucking the public teat? The doctrines of governmental paternalism have been fostered by the railroads as by no other industry in this nation.

Your three prophecies made in February, 1920, have been justified. They have been found true. Tonight I am going to make a fourth prophecy. It is that Section 15-a will be repealed in the near future.

Today there is another proposition being considered which has been proposed by the junior senator from Iowa, to which I am equally opposed.

I wish this organization, which has led in the fight to repeal Section 15-a, could see its way clear in the near future to lead in the fight to check this other movement. It is now proposed that we shall repeal the entire Cummins-Esch act. Have you ever paused to consider what that would mean?

For more than a generation you have heard of the colossal frauds committed in high finance by the issuance of watered stock and manipulation of security issues. You well know the stories of the Chicago and Alton, and the New Haven, and the Erie, the Wabash, and others. Finally, after many years of constant struggle in public and private, you have forced on the statute books the first provisions attempting to give adequate authority to the federal government to prevent the issuance of fictitious capitalization. The first time that law was written on the federal statute books was in the Cummins-Esch act. Now are you going to repeal a law which you have fought for during the past twenty years? It seems to me that you would be playing into the hands of the other fellow.

If there is a man of that frame of mind in this room, that wants that law repealed, giving to the federal government for he first time in the history of railroading, control over the issuance of railroad securities, I wish you would please hold up your hand. Not very unanimous.

Second, an important part of this law relates to the interstate distribution of freight cars during a period of car shortage, and for the first time in our history we secured in the Cummins-Esch act a law with teeth in it providing governmental control over the interstate distribution of cars during a period of car shortage. Of course, the commission can not manufacture cars when you need them. They must first be secured in another manner. But when cars are scarce, do you know how easy it is for a railroad to favor certain cities or certain industries or firms with great wealth and influence, how easy it is to favor the large institution which can swing traffic from one railroad over to another—a power that the small shipper can not exercise?

Finally, you have written on the statute books for the first time a law giving to the federal government the control over the intersate distribution of cars during a period of car shortage. I ask again, is there a solitary man in this room that wants that repealed? Won't you please stand up (No response.) Not very unanimous.

You have heard the old story of jumping from the frying pan into the fire. I think the folks advocating the repeal of the entire law are trying to get you and me to perform that particular act. If Section 15-a is repealed, there are many railroad men who will agree with you and say, "Yes, let's repeal the whole law." As I said before, that is simply playing into their hands. It would be a colossal blunder of the first magnitude. I say this group of practical farmers from all over the state of Iowa should take the intitiative in putting a quietus on that movement, and this is the time to do it. Let your declarations be so strong and clear and unequivocal and powerful that they shall be heard clear over there at the national capital.

Section 15-a must be repealed. The powers of the states must be restored as they existed immediately prior to the war. Other amendments will have to be made as the needs shall be demonstrated, but the entire law must not be repealed. Let's don't use a shotgun or a blunderbuss, let's use a modern rifle. We are after big game.

There has grown up in my life a sort of a habit, a kind of a custom for me to come here with this group of people from the homes and farms scattered over the state of Iowa, annually. I have come out here in order to review the work of the preceding year as counsel for the Corn Belt Association, to take stock of the situation, and to lay plans for the future. We have come together for this purpose practically every year for the past fifteen years except while I was a member of the state railroad commission. This enables you to make an appraisal of the work of the year, to consider whether it was worth while, and whether the positions taken by your representative met with your approval. It enabled me to come in personal contact with you collectively, to learn your viewpoint, your conditions, and to receive your orders.

Tonight I shall make my last report as attorney for the Corn Belt Meat Producers. I am no longer your attorney. I resigned that position last April, in a letter to Mr. Sykes at the same time when I resigned as counsel for five other organizations. Consequently, I have only a part of a year to report on. However, in the future, I may occasionally make comment on things as they pass by. Tonight I am a free lance and as such I intend to remain the rest of my life. On occasions I may speak my mind, and I purpose to do so whenever occasion may justify.

Last March I participated as your counsel in an oral argument before the Interstate Commerce Commission, in a case involving the first general reduction of freight rates throughout the United States in the history of American railroads. As an offset to the elaborate showing of the railroads covering several thousands of pages of exhibits, the only analysis of the financial condition of the railroads as a whole which was presented in this case by any group of shippers was the one which was financed by this organization in conjunction with three other associations of shippers. I tried very hard to get some help from various organizations. A man is so helpless in these great rate cases with a regular army of statisticians, accountants, financial experts, bankers and lawyers on the other side of the table, concentrating under magnificent leadership all their efforts on the great, basic, underlying issues of the case involving the adequacy of railroad revenues as a whole; and the shippers are split up into innumerable factions and groups, every little organization obsessed with its own needs and giving no attention to the great issue affecting everybody. What is everybody's business is nobody's business.

The firm of Roberts, Woods & Pettijohn donated the services of Fred W. Pettijohn, who had been chief cost accountant of the United States Railroad Administration during the war. They donated Mr. Pettijohn's services to us free of charge. They even paid his expenses to Washington and his hotel bill while he was there.

This case resulted in an order reducing rates $300,000,000 dollars annually in addition to a reduction of $100,000,000 conceded by the railroads on agricultural products on the first day of the trial.

The second important proceeding of national consequence during the year related to the convention of our railroads. I wonder how many of you folks in this room realize that today there is finally drawing to a close an investigation which will lay the foundation for freight and passenger rates for this and future generations to pay. What part have you taken in that proceeding? The final arguments on basic issues occurred within the past two months. In that hearing there was not one shippers' organization of any kind or character represented.

Mr. Hale Holden a few months ago told me of his relations to that investigation. Mr. Holden eight years ago took the initiative in arousing the railroads to the necessity for coördinated action. He had no part in the work after it was finally outlined. He said that it was with great difficulty that he persuaded the railroads to take part. They said, "What is the use? The commission has the funds. Let them spend the money. They are as honest as you and I." Of course the reply, the only all-sufficient one, was, "The courts are also honest, but when you have a case in court involving only $10,000, we will say, you fight it from start to finish. You present your side of the case."

As a result, the railroads of the United States organized a group of expert accountants, lawyers, clerks and engineers, totaling several hundred. During the past eight years, they have spent $63,000,000 in this work. The Interstate Commerce Commission has spent $23,000,000. And finally it now looks as though the leading counsel for the railroads in that work is going to sit on the supreme bench of the United States.

In striking contrast to Mr. Holden's success, I want you to listen to mine. Eight years ago, I urged upon the National Association of Railway Commissioners that the public must organize for this proceeding. "You are laying the basis for freight and passenger rates for generatons to come. In the future, the foundation for that will be this valuation, plus additions as they shall be made from time to time. This is the most colossal case ever tried in history. The railroads will be organized. The commission is the judge. Is it right that one side shall be presented most thoroughly and efficiently and the other side stay at home twirling their thumbs?"

As a result, the National Association of Railway Commissioners employed one lawyer and one stenogapher to fight that battle from the public side; and then they placed upon that lawyer all of the additional functions of a local representative in Washington, D. C., and nine-tenths of the bulletins issued by that lawyer are concerning other subjects than the valuation matter. I want to say, however, that Mr. Benton is a man of splendid ability and magnificent character, doing a fine piece of work.

I want to say before leaving this subject that in making these comments I do not for one instant attack the honesty, the fair-mindedness of the railroads. I simply say they are doing what decent business men ought to do. They have organized to present their side, and you are a bunch of blamed fools because you have not done likewise.

The valuation proposition is simply typical of so many other matters pending. In hearings relative to the grain exchanges, I was told that in no previous hearing before a congressional committee were any specific facts given except of the most incidental and haphazard character; that the representatives of the farm interests came and doled out a lot of sweeping, high-sound generalizations and phrases and then looked for results.

At the present moment there is maintained in Washington, D. C., by the American Railway Association, what is called the National Bureau of Railway Economics, covering most of a floor of one of the business blocks of that city, working in season and out of season, week after week and month after month—for what purpose? Gathering together the data, amassing the information, so that when it is needed in one of these great cases they are ready to deliver the goods. You haven't one farm organization in America that is attempting to do that on your side of the railroad question. I include the Corn Belt Association and the American Farm Bureau Federation and all the rest.

A few months ago there was a trial involving a 10 per cent advance in express rates. Where were you? A lot of you folks are express shippers. Where were you? I say, none of you were represented. The express companies were there, most elaborately prepared.

There are a whole lot of our individual cases that I could discuss that have been handled. I am not going to do that as I have done in the past. This is not the occasion for that. There are a number of farm organizations doing splendid work as to individual cases affecting rates on one commodity in one section of the country and on another commodity in another section, but on these great big questions affecting the whole people you are generally asleep when the contest comes, so far as adequate preparation is concerned. You have lacked the funds, and you have got to make up your minds that you must spend them, and then you have got to follow it up and see that these funds are expended so that your representatives do not have to rush in at the last moment against these tremendous odds and try to fight your battles successfully.

I am not seeking a job. I will not accept it if you offer it to me. It is the most important message I have got to give you as a result of the past fifteen years' connection with you. Prepare to show your side or suffer the consequences and don't whine about it.

And now, folks, in conclusion, if you will bear with me just a few moments longer. This has been a tempestuous year. Last March, in the closing argument in the general rate reduction case, Mr. Thom, chief spokesman for all the railroads in the United States, made a bitter personal attack on your attorney. No such personal attack has ever before been made to my knowledge on any lawyer on either side of any of these cases during the past fifteen years. He described me as an unsafe, unreliable guide, not entitled to the confidence of the commission. He was general counsel there for all the railroads—chief counsel for all of the railroads in the nation.

Sixty days later I was described by a spokesman for certain farmer and laboring interests of Iowa as a Wall street crook and a railroad tool. This charge in one form or another was published over and over again, not among the editorials very much, but in the news columns of many of the largest dailies in the state. The claim was stated and repeated over and over again in numerous dailies and farm journals that I had endorsed the Cummins-Esch act, which had been responsible for the increase in freight rates, and that I favored the ship subsidy bill.

Receiving these odoriferous bouquets from both camps made life quite exciting.

After the attack from my friend, Mr. Thom, my first impulse was to reply in a bitter, vitriolic, sarcastic vein. The letter was prepared to send, but on reflection I decided the wiser course was to ignore personalities and to discuss the real issues at stake. And we won the case, the biggest victory that we have ever had.

After the attack from my friend Brookhart, my first impulse again was to drag him through the mud and lambast him, brand him as a fool and a liar, but I refrained from so doing.

Tonight I desire to state that I believe Senator Brookhart is performing a service of value to the people of the state and nation. Of course, the statements he made concerning your speaker of tonight were not true, and I hope to live to see the day when he will recognize that fact. In the meantime, however, whether he does this or not, I shall not hesitate to give him any assistance I can on any matter where he desires it and where I believe that he is right; and wherever I believe he is wrong I shall not hesitate to so declare. If I did not take this stand, I would not be entitled to your confidence or to his, and I could not command my own self-respect. These great issues of public policy are vastly more important than my success or failure, than the success or failure of this man or that one.

In closing, I want to read once more, and for the last time, some words from Kipling which I read to you many years ago, and which seem very appropriate upon this occasion of my last appearance with you as your counsel:

If you can keep your head when all about you
  Are losing theirs and blaming it on you;
If you can trust yourself when all men doubt you,
  But make allowance for their doubting, too;
If you can wait and not be tired by waiting,
  Or being lied about, don't deal in lies;
Or being hated, don't give away to hating,
  And yet don't look too good, nor talk too wise;

If you can dream—and not make dreams your master;
  If you can think—and not make thoughts your aim,
If you can meet with Triumph and Disaster,
  And treat those two impostors just the same;
If you can bear to hear the truth you've spoken
  Twisted by knaves to make a trap for fools:
Or watch the things you gave your life to, broken,
  And stoop and build 'em up with worn-out tools;

If you can make one heap of all your winnings
  And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings,
  And never breathe a word about your loss;
If you can force your heart and nerve and sinew

To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: "Hold on!"

If you can talk with crowds and keep your virtue,
Or walk with kings—nor lose the common touch,
If neither foes nor loving friends can hurt you,
If all men count with you, but none too much;
If you can fill the unforgiving minute,
With sixty seconds' worth of distance run,
Yours is the earth and everything that's in it,
And—which is more—you'll be a Man, my son!

The President: We have been disappointed this evening in not having with us our third speaker on the program, Mr. Cunningham, secretary of the Iowa Farm Bureau. He has been unable to be with us on account of the delay of the train on which he was coming to the city. But we are fortunate in having with us tonight a man whose illustrious father many of us older men used to love to listen to in the days gone by, and at this time I am going to ask to speak to you for about ten minutes, in lieu of Mr. Cunningham, the Hon. J. B. Weaver of this city.

ADDRESS BY HON. JAMES B. WEAVER

Mr. Chairman, Mr. Secretary, Ladies and Gentlemen: I have enjoyed myself enormously here tonight listening to the account of your distinguished secetary, of his labors in the great capital of the nation for the great cause which you represent. You know Harry Wallace—I call him Harry, just as in the old days—Harry Wallace is living proof of Doctor Johnson's famous saying: "Much may be made of a Scotchman if caught young." Ah, how could it be otherwise, ladies and gentlemen? For do we not all of us remember that great upstanding character in the life of the nation and of the state, with his feet firmly on the ground, straight and strong, and his head up, thinking of good plans for his brother men, that tall form in the Mariposa Grove, that Sequoia Gigantea—dear old "Uncle Henry" Wallace?

You know they say that the Scotch are our closest relatives. While that may be true of the rest, I want to say that in this great Scotch family from the father and the mother on down—I merely state plain facts, for I knew them all intimately and do know them—they are giving of their lives and their energy, of their brains, of their hearts and of their money, to the making in this America a sweet and beautiful thing, which is the ideal in their hearts—from "Uncle Henry" on down to the youngest members of the family that I am acquainted with here in Des Moines.

Now, Mr. Thorne notices what they say about him—those railroad counsel. We know how superbly for fifteen years he has carried the great burden of meeting the most skilled minds in these great problems of transportation as your counsel. Now in addition to all his other honors he is going to carry a military title. He is going to be known hereafter as "the hero of five forks," just as General Butler was in the war days the hero of Five Forks.

Harry—the idea that I should be speaking of a member of the president's cabinet by that familiar term "Harry," but I started that way and I am going to continue. He told of that row of three miles of American Marines, how the majesty of the nation spoke in those youth in their uniforms standing at salute. Oh, yes, it spoke, and those Marines in your heart and mine carry an imperishable memory because it was on the morn when Foch threw like a thunderbolt straight into the brazen face of the enemy the Marines, the American Marines, and started the defeat and started the backward march which brought us the victory in the great war.

Now, I want to say to you men frankly that I congratulate you upon the best Christmas in several years. Ah, you say, "No." Are you thinking of the high prices of those war days when all the world was clutching at each other's throats? No, no. By organization, by effort, by thinking, by making yourself felt in the life of the nation, we are coming up. Prices are better. Normal conditions are being resumed, and there is a national consciousness today on subjects of agriculture such as there has never been in this nation before. So this is a good Christmas, a happy Christmas, and a promising and good new year.

Mr. Thorne spoke of Pittsburgh plus. Over here in the general assembly, if I may say a word personal—when I went into the thirty-seventh and served in the thirty-eighth and thirty-ninth, when I went in it was because I was born in this state, came from pioneer parents who came in as early as 1842, lived through as a part of that great home-loving and home-seeking movement which peopled this wonderful valley of the Mississippi, and the land, the soil, "the good, gigantic smell of the brown old earth," as Browning puts it, has ever been close to my heart, and over there in the thirty-ninth, the last session, I supported every measure of your Farm Bureau. "Well, Weaver, he is from the city. He comes from Des Moines. What is he doing that for?" Doing it because I know and I have known always what once was accepted as a platitude, but what, as the secretary has said, now is really in the consciousness of the nation: that it is so fundamental that agriculture should be prosperous if we want to have a prosperous national life here at all.

And Pittsburgh plus—I was going to speak of that—in the thirty-ninth I had the honor to offer the resolution condemning Pittsburgh plus and demanding that the Federal Trade Commission, in behalf of the state of Iowa, should do away with that practice which charges you for all the steel products which you buy, not only the freight from Gary, perhaps, where they are manufactured, but the freight from Pittsburgh to Gary as well as from Gary to Des Moines; and we passed it through the general assembly, and the Federal Trade Commission is busy on the job.

Not only so—I would not make a special plea here tonight, but I am also interested in another great thing for agriculture in Iowa, and I offered the resolution and put it through the general assembly last session on that subject, namely, the Great Lakes-St. Lawrence waterway. That will bring to the cities freighters capable of taking your products, your live stock products and your grain products, taking them abroad without transference to some other vehicle of transportation. That will come. (Applause.) Only I don't know when. Yes, because you know in these times when great sums are spent upon military achievement, it will cost, for instance, only $250,000,000 and will generate as a side issue electric power of nearly 2,000,000 horse power, electrifying a great section of the railroads of the country, releasing an enormous demand for coal in this country and giving us a chance to have motive power that must be run other than by electricity in the great central-west, costing you two or three cents—say two cents—to take your wheat from Duluth to Buffalo, and six or seven or eight cents from Buffalo on the remainnig 300 miles.

Gentlemen, I am not going to make you a speech. It is late. But let me say this: The great principle in our modern industrial and commercial life is thorough investigation and thorough organization, and the idea that the agriculture of the nation need not follow that principle, can neglect it, when all the rest of the world is busy thinking of their share in organization, is a perfectly absured proposition. But now, thank God, through the efforts largely of your secretary, and men like him and Mr. Thorne, we are going to have a study and thorough preparation on the questions of marketing, of financing, of the regulation of the grain exchanges, of the regulation of the live stock exchanges, and we are going to concentrate the very best brains—that is what we are doing, concentrating the best brains and the economic forces of the nation upon the problems, your problems and the problems which are also through you, the problems of the nation.

Now I will say another word. Just a word. I am not one of those who sees the old world destroyed. There is a grave question whether or not through the things in Russia, perhaps the breakdown of Germany, the situation around Smyrna, through the Dardanelles, Europe may not economically break down. I am one of those who believe that the foreign market is a matter of grave importance to the American farmer. I am one of those who feel this, that if we could pacify Europe and put her to work, the demand for food for mouths who have only been a quarter fed would be such that the American farmer would see a prosperity such as we have not seen in years. That leaves entirely out the moral question.

On the moral question, I believe it is America's duty to co-operate around the council table of the nations, to the end that starvation and desolation and anarchy and Bolshevism and economic destruction shall disappear in Europe. We will start the old world again in her old groove of peaceful effort. (Applause.)

I congratulate this association upon being the skirmishers, as Mr. Thorne has told you, skirmishers having prescience of the great problems that are now up for agriculture—out on the first fighting line. Now you see things beginning to come your way under the leadership of a Secretary of Agriculture. Why, when I think of him being there at these particular times I am reminded of what Queen Esther said to Mordecai. Mordecai wanted Queen Esther to interfere, to appeal to King

Ahasuerus, you remember, and she didn't want to do it. She said: "That is political. That is not the woman's place." And Mordecai said unto her: "Who knoweth but that thou art come into the kingdom for such a time as this?"

That is what I feel of this secretary—steady, careful, keeping within, as we must keep within, for the protection of you farmers as well as the rest of the nation—the constitution. But under the folds of the flag, within constitutional limits, there may be achieved very great reform in the protection of agriculture and its development, which is necessary to give you the prosperity which your hard work certainly gives you the right to have. It is a great day in which you meet in the midst of the work. It will go on. Mr. Thorne says: "I am no longer your counsel." He could not keep out of this fight, no more than he can fly. (Applause.)

I want to make one statement here that may not be popular with some of you, and that is this: If the republican party, to which I belong, had three years ago given its concentrated best thought and talent and passion—of course there is a great difference between being for a thing academically and being for it with a passion—if that had been done, today we would have a united party in the nation such as we have not today. Take that home and think about it. That is the way I feel about it. It is doing it now, and we are all past that time on the market when corn dropped from $1.60 to 25 cents and oats from 75 and 80 down to 20 and 18—new oats in the fall of 1921. I know what the situation was, when your purchasing power stopped as if an automobile had run up against a great building—stopped dead. When that stopped it opened their eyes.

Now with better prices I see the papers are saying that trade is getting better, and they will carry in their hearts a consciousness of your importance, the importance of agriculture, such as they never had before. I congratulate you upon your service, congratulate your counsel upon his distinguished service, and your secretary upon his leadership in the greatest movement, namely, that of the producing of the food and clothing for a nation of 110,000,000 people. I thank you.

THURSDAY, DECEMBER 21, 1922

Morning Session—10:05 A. M.

President Sykes: We will now consider ourselves in session and come to order, gentlemen. The first number, as you will notice, on our program, is Hon. L. V. Carter, of Hardin county, New Providence or Lawn Hill. Mr. Carter is a farmer and feeder. I can vouch for that, for I was out to his place this fall. And he is also the state representative of Hardin county. We are fortunate to have him with us this morning. He is going to talk to you this morning on some cattle feeding problems from the standpoint of the farmer and feeder. So at this time I take pleasure in introducing Hon. L. V. Carter, of Hardin county.

ADDRESS OF HON. L. V. CARTER

I think the program schedules my subject as "By-Products of Cattle Feeding," and I wrote the secretary of this association that that would certainly give any man leeway enough to say anything he wanted to and still keep within the bounds of his subject, whether it was appropriate and worthy of our discussion or not. So I may digress a little from the mere story of the feed lot and feeder part of the time, with your indulgence.

There is very much that I had thought of saying, or that I had thought might be said and covered by this subject, along the lines of experience in feeding other things than corn—mill feeds. I think most of us perhaps have had considerable experience with the mill feeds, but in recent years, with money scarcer and clover and alfalfa more plentiful and corn cheaper, we are sticking more to our own feeds. However, I have no thought at present of discussing that subject, particularly along that line.

I have jotted down a few of the things I wish to call your attention to, for fear that some of them might slip my mind. I might say that I was born and grew to manhood in a community where there were many cattle feeders—men who fed from just a few head, a part of a load, to six or eight or ten loads a year—a community in which there were many small cattle feeders rather than a few large cattle feeders. And our community has continued to be more of that nature. We have never had a man that fed many hundred head in a year, as some of you do and some of your neighbors do. Our feeders have mostly been men that have fed from a load or two to perhaps a hundred head, and maybe once in a while a man that feeds a couple of hundred head during the year.

I feed cattle partially because I grew up in a feeding environment, I suppose. My father, along with his neighbors, fed a few cattle practically every year. Since I have been farming for myself I have fed cattle every year. But if anyone is listening to this paper or talk with the thought that I have found some sure way to success, they will certainly be disappointed. If they expect some remarkable story to quick and sure returns and no losses, they are in line for a real disappointment.

I am one who has attempted to pay for his farm by feeding cattle and hogs. With me live stock feeding is a business. My farm is my business and not my playground. In the main, I am one who is convinced that it pays better to feed our corn than it does to sell it; and I mean by that that the average price per bushel through the steer and the hog is more than the average price per bushel at the elevator, over a long period of years.

But this only leads me to my subject, "The By-Products of Cattle Feeding." This is a day, you know, when many of the so-called big business enterprises rely almost wholly on the sale of their by-products for their net income, their net profits; and after all, with these concerns, the by-product may become the major enterprise, and in cattle feeding it may be something the same. However, I am not one who is advocating or who is content to feed steers for the profit from the by-products. Unless live stock feeding will pay more per bushel and per ton for the feed that they consume, I am not content to feed, although I will confess that with the experience of some other people, whether they are here or not, I did not get market price for my corn and hay.

I own and operate a farm that has been a so-called good stock farm for a generation or two. I might say that my experience in farming and cattle feeding has been on two different farms. My brother and I farmed together for seven or eight years on one farm and were pleased to see the fertility of the soil increase and the yield increase. Then I purchased another farm and sold my interest to my brother, and in a way started over again, started with a soil that was somewhat depleted, although, as I say, the farm had been considered a so-called good stock farm for many years. And, as I said, during the eight or ten years that I have been on the farm that I now own and operate, it has been my greatest delight to watch the yields increase year by year. I am certain that during the last four years there has been twice as much corn and clover produced on this farm, as I was able to produce the first four years I operated it. Of course, there have been recently a series of good seasons, but largely the vast amount of manure that has been returned to the land has been responsible for the increased yields.

I don't know what the experience of most of you has been, but in our community on the farms that have been devoted to live stock, to feeding, there is a noticeable increase, a decided noticeable increase in the yield of corn over what it was some fifteen or twenty years ago. Sixty and eighty and even a hundred bushels of corn is no more uncommon on our best farms than fifty and sixty bushels was when I was a lad. I remember very well that if a man claimed that he had seventy-five or eighty bushels of corn per acre twenty or twenty-five years ago, we were skeptical; we scarcely believed him. That is true in our community. I am not saying whether it was in yours. But eighty and ninety bushels and one hundred bushels is not uncommon, and you know why.

We perhaps will never find an animal that so economically turns corn into meat as the hog. The sheep is the scavenger of all time. But to market the clover that should be raised and the silage and fodder that must be saved on these Iowa farms there is but one answer, and that is cattle. Dairying is sure, slow and sure, and the pure-bred breeder is essential; but the vast amount of our clover and silage on these Iowa farms, a very vast amount must naturally be marketed through the fattening steer. It is a business fraught with hazard. It may be somewhat a speculation. But this increase in the fertility of these Iowa farms is a profit that we have not always accorded to the feed lot.

Iowa soil was deep and rich originally, but as our state grows older we will finally come to the parting of the ways, although this may seem so remote that you wonder whether it is worthy of consideration. But I believe that the time to talk conservation, whether it is conservation of soil, conservation of the forests or conservation of any natural resources, is while we have something to conserve rather than to let it all slip away and then begin to talk conservation. So I believe conservation of the soil is a worth-while subject.

Our land will gradually, in generations to come, produce less and less, and I can imagine—whether you will go that far with me or not—I can imagine that under certain conditions these broad, rich Iowa acres might, in rare cases, be abandoned as some of the farms in New England and the south. Some of those little valleys in New England and in the south were wonderfully prosperous and fertile generations ago, but they have been wholly abandoned and grown up to scrub pine and other scrub trees as you know. So I can see that in generations to come such a thing might occur on our broad acres. At least the possibility of a profitable production might cease.

Every one of us knows of farms naturally as fertile as the Almighty ever created, that have been corned year after year and have been so worn out that it is almost impossible to cultivate them so well that even thirty or forty bushels of corn can be produced. On the other hand, it is possible to conserve the soil in a way that will produce more and more. After a period when the cost of production has not been returned to the Iowa farmer, it may seem out of place to talk too much about the conservation of soil fertility in order that we may produce more, but you know well that the farm that has come nearest to paying the cost of production is the farm that has yielded well per acre.

I remember well, and you do, too, perhaps, that P. G. Holden, during his supremacy, told us in every hamlet and corner in every address hat he made, that two years of corn, one year of small grain and one year of clover, with the manure returned to the soil, would produce more corn in a period of years than corn every year would; and he never uttered during that campaign for seed corn and better corn conditions a truer statement than that. He also went on to say, as you know, that you would get your clover and your small grain extra, and furthermore from year to year you would see your yield increase.

I may digress even a little further from the subject than I have. I see vastly more in this conservation of fertility than mere profit in dollars, and it is well worth while from a financial standpoint alone to lay any stress that I may upon the conservation of fertile Iowa land. I believe the Creator made this great middle-west for the home of a permanent agriculture. There are those who would have us become a great industrial nation at the sacrifice of most everything else and buy our foodstuffs where we can buy the cheapest. I think that idea has lost its popularity some in the eastern states, but during our peak prices there was a tremendous influence along that line to make America a great industrial country and buy our foodstuffs where we could buy them the cheapest, and anywhere and anyway that we could. But, as I say, I believe that the Creator intended that this should be a great home for permanent agriculture in this great Mississippi valley. A rural citizenship has made America distinctly different from Europe. The story of the farm boy from the country to the greatest places of responsibility and influence in our great cities has ever been the fascination. I believe this is what we should maintain.

We are coming rapidly to a place where these farms either will be tilled by an ignorant peasant class, as they are in Europe, or we will continue under careful leadership and direction and forethought to develop this American citizenship on the farms in the United States that we have so long taken pride in. We are nearing the parting of the ways —the peasant, or rural citizenship which has been the pride and backbone of America. It is not alone a question of making a happy and prosperous social condition on the Iowa farm. It is a question of producing leaders, not alone of agricultual societies and farm organizations, but leaders of the nation. If they are not produced, if leaders and great men are not produced on the farms of the middle-west, where will they be produced? You can not go to New York City or Philadelphia or Boston or Washington and find many of the leaders of finance or industry that are many generations from the soil itself.

This whole nation has been awakened to the fact that agricultural prosperity is absolutely necessary to national prosperity, as we were so well told last night, in a way, during the last three years, that it never had realized before. As we were told last night, we had a certain big brother sympathy from industries and cities for many years, but during the strenuous times of the last three or four years those industries have found that their sympathy for the farmer, their good-will toward the farmer, was not a matter of mere sympathy for the farmer but the good of the farmer was absolutely one and essential to their good and prosperity. The whole nation knows and knows well in a way that it never knew before that an agricultural collapse means the collapse of the financial prosperity of America, and just so would this country realize that if the splendid rural citizenship of these farms decays so the citizenship of the nation decays.

But that can not be shown in three years of pinched times on the farm, or two years of strenuous times on the farm, like this financial condition and the general relationship, the co-relationship of rural prosperity and national prosperity. I say this other can not be shown so quickly, but once we let the prosperous farmers, the thinking men of our farms, leave those farms on account of lack of prosperity or lack of soil fertility, the nation will sometime find out, as Europe has found out, that it is a decadent civilization, whenever your land is tilled and operated by a population, a class that is so low that they can not work out from that class to a higher class.

You know that the motto of America has been that, no difference where a man stands, he can rise and rise; and that is the citizenship that I am appealing to you for. The basis of the new blood that flows from the farms to the cities, as remote as it may seem, is a rich soil upon which is based a prosperous agriculture. I have not much sympathy for those who come out and tell us about improving the social conditions of the farm. It is absolutely all right, too, in a way, and yet it is not a basis of the foundation. They tell us that if the social conditions of the farms are improved, the young people will stay; they will want to farm; that if we have better modes of transportation, if we have better houses and better homes and better things, the boys and girls will want to stay and help out.

But I'll tell you what I think will keep the ambitious boy and the ambitious girl on the farm, and I believe that is the only thing that will keep them on there; and that is when they see that there is an opporrnity to possess and to accumulate and to become prosperous. You are not going to keep a boy that is worth while on the farm just because of a town that he wants to go to, or a fine automobile to ride in, or electric lights in the home. But if that boy is made out of the right kind of stuff, and the stuff that we hate to see leave the farm, he will leave because of this—there is no opportunity for him to accumulate and expand and develop all his powers so much as there is in the city. And the thing that I am alarmed about, and the thing that I am anxious about, is that the conditions on the farms of the middle-west shall be such, whether it is done by live stock feeding or what it is, that the soil will be maintained so fertile and conditions will be so prosperous that the young man sees that there is opportunity to spend a life and to accomplish the things that he is ambitious to accomplish there on the farm, the same, or equal, or better than it is in the city. A boy with as much of the ambition tied up in him that the American boy of this type has is looking for a place to spend that life where he can get somewhere and do something. He is not looking for theaters to go to, or modern conveniences, as good as they may be. He is not looking for the social life of the city. That fellow is looking for a place to do something and to be something; and if we settle down and back and back until the rural life is a peasant life, as it is in Europe, what is that fellow going to do? There is no opportunity for him there, and that is the thing that concerns me when I get to thinking back about the basis and the foundation of this condition here in the middle-west. That is the thing that stirs my blood.

Let us organize. Let us have our Meat Producers' organization and our Farm Bureaus, and men skilled in holding the reins of government and the reins of economics so that we will get fair play and a fair show, where the best men and the biggest men can afford to spend their lives on the farm. (Applause.) I am not pleading for a prosperous and a permanent agriculture and a rural citizenship in order that our agricultural communities alone may be better and more worth living in, but I am pleading for it for the good of the nation.

I am one who lives in Iowa because I love Iowa. I suppose that I live in Iowa because I was born here, and naturally was raised to think it was a good place. But it goes a little further than that with me. I have got a lot of sympathy and a lot of attachment for Iowa and for Hardin county, my own county. I believe Iowa is the best state in the nation. I could run on here and tell you about the fact that the cows alone of Iowa bring more money into the state every year than every bit of citrus fruit that is sold in the United States. I could run on with a whole string of stuff like that. We haven't half advertised Iowa. Stanislaus county, California—I have got a lot of sympathy for California—my mother-in-law lives there—alone spends $100,000 a year just sending out advertising about the good things of their county. How would the farmers stand for a $100,000 levy in one of our taxes to advertise what we have, let alone building good roads?

I may be guilty of repetition somewhat, but I want to say again that the plea for rural conditions and the maintenance of rural citizenship is not a matter so much of concern or betterment for the sake of rural conditions, but it is for the sake of this whole state and the whole country. The basis of everything that is good or prosperous, in the middle-west particularly and in this nation as a whole, the final basis, is the fertility of the soil.

You can talk about the prosperity of the city of Des Moines and the bank deposits of Iowa, about our good schools and our good colleges, and I pride in these as much as any of you dare to, and yet the basis is the soil fertility. If we did not have rich soil in Iowa what would we have here? Then why do we treat the fertility of our soil so lightly? Why do we take it as a matter of course and mine it rather than farm it? There is a close relationship between good soil and good citizens. I have always felt that an intelligent live stock farming program is on a little higher plane, when I think of these by-products of cattle feeding or live stock farming.

We are a group here met primarily to consider the business of feeding and marketing of live stock, so that we may be more prosperous, so that our business may be more profitable, and it is well worth our while that we should so be. But there are by-products remote in national prosperity and in national citizenship that are far beyond the feed lot, and my plea is for a continuation of a permanent, substantial rural citizenship, and again I wish to repeat that I believe there is a real, vital relationship between good live stock farming that maintains the soil that got created in the Mississippi valley and the development of a rural and national citizenship of which we have so many years been proud and of which we always will be proud. (Applause.)

The President: If there are any questions that any of you men wish to ask Mr. Carter we will give opportunity for a few minutes' discussion. We are not so rushed for time as we were yesterday.

I would just like to emphasize and endorse what Mr. Carter has said to you concerning the conservation of the soil through the process of live stock farming. I am a little like Mr. Carter, I guess, along those lines. My environment has been such, I guess —I am sorry to say I did not inherit it because my father didn't seem to ever have any love for live stock, so I certainly did not inherit it. But I remember as a boy, how they always appealed to me, and I always felt at home in the feed lot and looked forward to the time when I could do business myself in that way and have something of my own. Somehow, when the feed lots are empty and I go out to the farm I do not feel at home. It seems as though there is something lacking there. There is something that is not there that ought to be there; and the facts are that our feed lots are hardly ever empty. They never are empty of both hogs and cattle, but there are times that we have no cattle on feed.

We are not big feeders, either, but we manage to have some cattle on feed almost constantly the year around, not because we are getting rich out of it, as Mr. Carter has said to you—not by any means, but because our farm is improving in fertility. We are raising by far larger crops on that old farm than we did thirty and thirty-five years ago, when it was practically virgin soil. Our corn crops are away ahead of what they were then, and I attribute it entirely to the fact that we have given our attention to live stock farming, and I do not see how—sometimes it is a conundrum to me to discover why men insist on grain farming, and continue it year after year and year after year with these valuable Iowa farms, and you will scarcely see any live stock on the farm at all. I can not understand it.

Of course, just how the younger generation is going to take to live stock farming is quite a problem. I am not on the program for this speech. I am filling in the place of another man that could not come. Mr. Bane was on the program. You will pardon me for not mentioning that fact. He was to talk to you on his experience in feeding bulls, but somehow Mr. Bane was unable to get here, so that we are one number short on the program, and the Committee on Resolutions is not ready to report yet. I don't know whether you men care to bear with me or not, but I was just trying to fill in and kill a little time here as we go along.

But as I was saying, I never could quite understand how an Iowa farmer, and especially if he owned his farm, could make up his mind to raise grain and sell it and continue to mine his soil in that kind of a way and haul the fertility to that elevator or to some other feeder in his community, haul the fertility off through his grain year after year, and sell it either to the elevator to be shipped out of the country or to a neighboring farmer to go back into his soil. It is amazing that men who own Iowa farms can make up their minds to do that, and yet they do do it.

Now, as I started to say, just how the younger generation is going to take to this live stock problem—it is a real problem. I never saw a more discouraged bunch of young farmers than we had in this country for about eighteen months, that is, especially the men who had been dealing in live stock and in the feeding game, when the deflation set in; and you men know what happened. We sold cattle for three and four dollars a hundred less than they cost us. That was a terrific blow on the young man that was just starting out, that hadn't had some of those rugged experiences to go through in the years past that we older men had had to contend with; and the facts were that we found discouraged men all over the state, that were absolutely discouraged, heart-sick over the feeding proposition, and declared that they would never feed another steer, would have nothing more to do with it.

But I believe that the past year has given some of these young fellows courage. In my circulating around among them I have found an entirely different feeling among the younger men who had gotten back into the game to some extent during the past year, because they had made some money—their cattle had proved a good investment. They saw the other man haul his corn off, either to the neighboring farmer or to the elevator, and sell it for 30 or 35 or possibly 40 cents if he held it long enough, and they felt as though the feeding game was not so bad after all.

There is one thing about the feeding game. Of course we must not expect that we are going to make big profits every year. That is one thing that is impossible. You won't do that in any business. And so that is one of the things that we older men have learned. As long as we stay in the feeding game we will not expect big profits every year, and occasionally we will have years that we will have to take quite a severe loss, from a financial standpoint I am speaking; but when we stop and analyze the whole entire situation and what our farms would be if we hadn't entered into the feeding game at all, and how we would have robbed the soil of its fertility, and the productive value of our farms compared with what they would have been under other conditions, why we sort of congratulate ourselves after all and make up our minds, as Mr. Carter has said, that, over a period of years, live stock feeding pays.

You can go all over this state—I don't suppose there is a man in the audience that has driven as many miles over the state of Iowa as myself, and I don't say that boastingly, because the work that you people have given me has required this. I can just see the outstanding difference when I get into a live stock community. Why, you don't even have to inquire. You can see it right on the face of everything, that the live stock community is more prosperous than the communities where they raise grain and sell it—the state over. There are absolutely no exceptions to the rule at all, and take it for a period of years there is not any question in my mind but what the live stock farmer is going to be ahead in dollars and cents besides the increased value that is conserved in his soil to produce greater crops.

Some day we are going to hand these farms down to the younger generation. We old fellows won't be here always. That is one thing that has impressed me, especially after my family began to grow up and I realized that some day these children and these grandchildren would be trying to make a living on the farm that we older people have attempted to build up. Now are we going to hand those down to those children and to those grandchildren in a depleted condition, in a condition that means starvation to them the rest of their lives, and then they hand them down to their progeny in a more depleted condition; or shall we, as outstanding figures in the greatest producing state of the nation, hand down to future posterity these farms in better condition and in a higher state of cultivation, in a condition that will produce greater crops and a larger yield than they did in their virgin state? We can do this, men. There is not any question about it. We can do this as live stock producers of this great state. We can set the example. We can lead the way for the young men to follow. I don't believe that they will go very far wrong if we set the example and teach it to them and show to them the difference between the live stock farmer in the long run and the grain farmer who makes up his mind that he is not going to work the year around.

You know there are a lot of people that are not in the live stock business simply because they know it is a year-around business. They want the winter off; they want a vacation during the winter. They don't want an every-day job the year around. If a census of the grain farmers of the country was taken, I am satisfied you would find that a large per cent of them feel that they are entitled to a vacation a certain part of the year. For that reason, they don't want to engage in the live stock business because it is an every day job for 365 days in the year. I believe that we can afford to set an example, as I have already stated. I want to emphasize the importance of we who represent the oldest live stock organization in existence, so far as I know, that has had a continuous record of results of which we ought to be proud. We can afford to set the example for these younger men to follow.

Now we are going to call for a report from our treasurer, Mr. Goodenow.

Chas. Goodenow, of Wall Lake, treasurer, then read the following report:

SECRETARY'S REPORT

Receipts for the year..................................		$4,583.00
Disbursements—		
Bank collection fees..............................	$ 31.10	
Refunds to county associations..................	30.00	
Gortner State Bank (bad check)................	5.00	

Director's expenses and delegates to Washington, Des Moines, etc.	434.50	
Stamps, printing, stationery, etc.	781.06	
Bond for treasurer	12.50	
Bilz Sign Co., display card, meeting	2.00	
Rev. Wm. McCormick	5.00	
Miller Hotel Co.	37.90	
W. J. Carmichael, advance to Meat Board	40.00	
D. W. Mott, telegram to Washington	5.00	
Henry Brandt, reporting annual meeting	119.15	
Contribution, American National	100.00	
Charles Goodenow, canvass expenses	33.10	
A. Sykes, salary and expenses	2,219.30	
Marilla Goodenow	712.97	
Anna T. Davis, special stenographic work	5.00	4,573.58

Mr. Goodenow: We have not collected as much money this year as we did in some of the years prior, but we haven't had as much work in the field as usual so far as that goes. I did a little work in a couple of counties or a little more, and I find that the farmers are not dead by a long ways. They are just kind of dozing along waiting for somebody to come and see them. Last year I worked some and I found it was pretty hard to get money. They didn't have it. We couldn't get it in places where they didn't have it. Our members were very hard up as a rule. This year they seem to be more easy; they have got it and they are more willing to pay.

The President: Are there any questions concerning this report that you wish to ask Mr. Goodenow, concerning any of these items? There is nothing covered up here. If there is anything you don't understand—

A Member: I didn't hear you read the secretary's expenses. Haven't we got a secretary?

The President: The secretary has never made any charge. Secretary Wallace would never accept anything—that is H. A.

Mr. Ames: I move the adoption of the report.

The President: A motion duly seconded has been made to adopt the report as offered. All favorable to the motion signify it my saying aye. Contrary no. The ayes have it, and it is so ordered.

We will now listen to the report of the auditing committee. Mr. Hill.

Mr. E. L. Hill then read the following report of the auditing committee:

AUDITING COMMITTEE'S REPORT

Your committee appointed to audit the accounts of Treasurer Charles Goodenow beg leave to report as follows: We have gone over the accounts of the treasurer, have checked them up with the secretary's records, and find them correct in every detail, and showing the following condition:

On hand, December 8, 1921	$4,489.43
Moneys received during the year	4,546.90
Total funds for the year	$9,036.33
Total expenditures for the year	4,538.69
Balance on hand, December 2, 1922	$4,497.64

Respectfully submitted,

W. P. DAWSON,
E. L. HILL,
J. C. COFFMAN, Committee.

Upon motion, duly seconded and put by the president, the report was approved.

The President: That brings us up to the report of the committee on resolutions. If anybody has anything to talk about I would like to hear from them. They thought they would be ready to report about this time, about 11 o'clock.

Just while we are waiting—Mr. Gunn was to tell you about this live stock meat board, but his time is taken up with the committee on resolutions. I should not have appointed him there. I didn't think about it at that time. You possibly would like to have some little idea of what they are doing.

From what I can gather from what Mr. Gunn has told the board of directors, the meat board is now beginning to function. They have been handicapped since the organization was formed because they could not find or locate a suitable manager. The plan provides for a manager for the board. He tells us that their greatest difficulty is to locate a suitable man, a man that is big enough for as big a job as that is; but at the last meeting of the board they appointed a special committee which is now searching the country for a suitable manager. At the same time they are going on with their work under the temporary management of the secretary and president of the board, assisted by Mr. Thomas E. Wilson, and they are getting out their publications in the way of advertisements. I have received quite a number. They are getting in position to start this advertising campaign in a systematic and, we believe, beneficial way.

Another reason is the fact that up to the present the Chicago Live Stock Exchange has not seen fit to adopt the rule to deduct from each shipment five cents per car. The question was voted on during the summer and voted down by the Chicago Live Stock Exchange. Under the rules of the Exchange they cannot call up that question again for reconsideration and take another vote on it, as I understand it, inside of six months; so that they have to wait six months before they can consider it, which I am informed they expect to do and are very hopeful of carrying it or putting it across, so that the Live Stock Exchange in Chicago will then collect or take from each car five cents per car to be turned in to the Live Stock and Meat Board. That is one of the things that has seriously handicapped them.

The Producers organization at Chicago is turning in each month to this board five cents per car for all of the stock that we handle, but we are the only firm doing business at the yards, so far as I am informed, that is doing this. Some of the smaller markets —Omaha is collecting five cents per car on all stuff entering the Omaha market. Some of the other smaller markets are doing the same. Kansas City has adopted the rule by quite a large majority, I understand, but for some technical reason it is being held and they are not contributing their five cents per car to the meat board. So that as soon as they can get these little difficulties, which seem to be difficulties at the present time, ironed out, why, we believe that the meat board is going to be in a position to function in a way which will be of real benefit to us.

The figures that Mr. Harlan gave you here yesterday—I was sorry that we were so handicapped for time, especially when Mr. Harlan got into those figures on consumption of meat here, that we could not have spent more time on that. You will recall that his figures on the consumption of meat show quite a marked increase for the last year. That is home consumption that I am talking about. I was surprised to learn that fact. Now, it just demonstrates to my mind that there is no doubt but the agitation that has been going on through the press already concerning the work of this National Live Stock and Meat Board is already bearing fruit in this country, that people are beginning to eat more meat, because those figures actually demonstrate that fact, the increased consumption in meat during the past year, and especially in pork.

Mr. Eisele: Do the packers contribute to this?

The President: They do at all markets, where it is adopted. They are not in Chicago. At all of the markets where that rule is adopted and they are collecting from the shipper, they are collecting from the packer also. But at none of the markets where the rule is suspended or not in force are the packers contributing, and neither are the shippers.

Mr. Eisele: This Wilson, that is the packer?

The President: Yes, sir, that is the packer. The packers are ready at Chicago to contribute their share just the moment that the Exchange adopts the rule, but of course they feel that it would be unfair for them to go ahead; and then, on the other hand, the plan provides that we shall each contribute alike, and I question very seriously whether the stock men would desire the packers to finance it. That has always been the position of the stock men, that they did not want the packers to finance their propositions; they wanted to do their part. It is not the fault of the stock men, you understand. We have never received an objection from a stock man to the payment of this nickel a car—not one. Neither has the meat board. It is simply because the live stock exchanges have refused to collect that nickel, and we have no other way of collecting it, only through the commission firms.

Mr. Mott: What became of that deal that we put over; weren't we collecting five cents a car?

Mr. Gunn informs us that in spite of these handicaps they are having a fairly good income at the present time, and with the prospect, of course, of that being very materially increased during the present year. So we believe that this thing is going to work out all right yet and that we will get a real national meat board that will really function in the interest of the live stock producers of the country and overcome a lot of this misinformation that has been sent out by quack doctors and one thing and another in one way and another; such things as the influence of the ''eat-no-meat'' campaigns that were put on during the war, and all that stuff that we have got to overcome.

A Member: Mr. President, there is no organization that has authority to order that five cents taken from each shipper's car?

The President: No, sir.

The Member: We could direct our officers.

The President: We could resolve in favor of it. I am glad you called attention to that. Possibly we could incorporate that in our resolutions here favoring that. That would be a fine thing.

I think at the last annual meeting some such resolution was adopted, however.

Mr. Eisele: All of the live stock organizations have adopted similar resolutions, haven't they?

The President: We are requesting our shippers to co-operate. I think it might be well to renew that after the resolutions are offered. If there is no resolution along that line, one can be offered on the floor of the house and added to the resolutions that will be offered by the committee. Of course we have no power to enforce that rule as an organization.

A Member: Don't you think, Mr. Sykes, that our experience in the Corn Belt, the rest of the organizations would all feel disposed to do the same if the Corn Belt would pass such a resolution?

The President: Yes, but the other organizations are all in favor of it. There is not a live stock organization in the country that has not resolved in favor of it. They are in favor of it and urging it.

The Member: I think that would be proper to pass such a resolution.

The President: It was unanimously adopted last winter at the American National meeting out at Colorado Springs. It was adopted, without a dissenting vote, in a packed house there.

Mr. Thompson: Along the line of this discussion, and I have not been able to hear all of it, isn't it a fact that the Live Stock Exchange feels timid about endorsing this five cent proposition because many of the shippers have been protesting to their commission men as to the present charges they have been making in regard to the selling of stock? I know that I have talked to one or two of them and I find that they are getting no relief from this excessive charge that we all believe they are getting. Isn't it a fact, also, that your new corporation has, in order to avoid trouble, gone into conjunction and is charging this $18 a car for selling these cattle with the proposition that if there is anything more than paying the cost, which I think we all understand, that there will be a refund to the shippers? And this Chicago Exchange, as we call the large men who sell the most of the stock, they are somewhat timid as I think in endorsing this five cent movement on the ground that they know that the average shipper is now somewhat dissatisfied with the $18 or more charged for each car. So if you are to pass a resolution endorsing this five cent action I believe, while there is but a small per cent of the men represented here that are shipping stock, I believe that in that resolution we should ask those commission men to go back to a more normal condition that existed prior to the rate of $18 a car.

We have been talking over our troubles here today and yesterday. I am not going to occupy the floor, but we have talked about the different forces past and gone, fertility of the soil this morning, and other things that came up last night. I believe every one of us who has been here in this meeting has surely been well paid for the time and the trouble expended in coming here, and yet, while my remarks may seem rambling, not expecting to talk at all, I believe that there are many things that we can learn from this.

I am reminded of all the days that have gone by where all classes of men have been in the same trouble that we have been in. The cattle feeders have been up and down and lots of them are not here at this meeting at all. We have had it something awful in the last two years, and as Sykes says, the fellow who fed a little load of cattle lost a little bit of money and the big men lost more. I know men who lost as high as sixty thousand dollars, and thirty and twenty.

I must tell a little story on the side, about a friend of mine that went out to California. He had been wanting to go for years and years, and he had never felt he had the money to go. I am not sure but Mr. Sykes was there the same winter. But he had gone ahead of me, and the second day after we arrived of course we had to go over and see my friend Tommy Black. And we went over and found him nicely situated and I said, "Tommy, how do you enjoy it?" "Why," he says, "I have got the worth of my money before I got here." Gentlemen, we have got the worth of our money before we go there. This meeting is something bigger and greater than our staying up on our home farms.

A friend of mine, Mr. Bowers, is here, and I am glad to see him. I tried to get two or three more men to come, but they would make this excuse and that excuse. I don't know—possibly it is the little dollars and cents that they spend down here—but they are not here. They ought to be here. All of us fellows who have been here have got the worth of our money, I guess, before we landed in Des Moines. If we didn't, we will surely get it before we go home. I think it is a wonderful meeting, and we ought to have a thousand or two thousand people to hear the discussion last night and what has been going on.

A whole lot of things have been said. Something has been said by our friend over there this morning about fertility of the soil and farm products, but there is a large field yet to be covered. I was of the opinion a few minutes ago that we ought to call for something for the good of the order. We have got Mr. Ames and two or three more good speakers far superior to me. They might get up and lead out in those things. There are many things in rural life, many things that have popped up as well as our downfall in feeding and the upkeep of the soil. There are many things that concern our home and our young boys. Something has been said about that, but there is a large field yet to be covered. Shall we inaugurate these community clubs all over the country? I think they are a good thing. I think we have got to do something that will get our boys, as has been expressed here today, we have got to do something to get the boys to realize that the home has got enjoyment, that the father will give him an automobile if he can afford it, to let him get out and come in contact with the world; and more especially do I carry this thought of our president, Mr. Sykes, that the time has come when you cannot confine a boy down to a farm and see that he grubs and grubs and gets along. We have got to make some arrangement for holidays, some arrangement to get away from that old farm and that old grind which he said feeding cattle means—that same old routine.

We have got to encourage and arrange so that these sons can get away for a week or two weeks for enjoyment. I will illustrate. I have a son upwards of 45 years old. He is not with me. He ought to be. He made two trips to California and has gone up and down the coast, and he has gone up into Canada. He said he had a good time and came back and told us of what he had seen. He was up in the glacier country. He comes back and he is worth more on the farm than all of his expenses. When he gets back he goes in with new vim. Last fall, just a while ago, he said, "I am going to have a little time off. I am going to go into Chicago with the cattle." "All right, go." "I may not be back for maybe two weeks." He goes into Chicago, and goes up to Minneapolis and goes to the fair, and he goes around and he comes back and buckles on his clothes and goes to work. While I am paying him what they call a good salary—I am paying him $2,000 a year to stay there and boss my job—he takes these outings and I never count a minute's time that he lost. Why? Because when he comes back everything is attended to. I believe such thoughts ought to be advanced to all boys. We get narrow-minded, hide-bound, and the boys we are raising are raised with different opportunities than we were and they ought to have those different ways of getting out and having a good time.

The President: The resolutions committee is ready to report. Just for your information, Mr. Thompson, I will say that this organization, in conjunction with some of the other live stock organizations, is now engaged in a case with the packer and stock yards administration to secure a reduction in these commission charges. You were not here when I read my report yesterday. I referred to that at some length. So far as securing anything in a voluntary way, why, of course we gave up all hope of that and went to the department to try to secure some reduction in these charges.

Now the chairman of our resolutions committee is with us, and we will listen to Mr. Dawson, the chairman, read the report of the committee:

Mr. W. P. Dawson: The work of this committee has had to be somewhat hurriedly done. The committee really requires a lot of time to draft the sort of resolutions that an organization like this ought to put out, because we are known by the resolutions we adopt, largely. If I might suggest that in the future the resolutions committee be appointed a couple of weeks ahead of time. I think it was three weeks that was given by the Iowa Farm Bureau Federation after their first year's experience in hurriedly drafting and passing resolutions. Since then their resolutions committee, or a group from them, have met and drafted tentative sets of resolutions that could be acted upon later.

Mr. Dawson then read the report of the committee on resolutions, and after slight discussion and amendment of the report, the following resolutions were adopted:

RESOLUTIONS

1. Since there is prospect of a great increase in live stock feeding, we call on the National Live Stock and Meat Board, the packers, the daily press, and the United States Department of Agriculture to increase the consumption of meat products at home and abroad.

2. We pledge our support to the efforts of the producers to handle the shipment and the selling of live stock through co-operative agencies.

3. We advocate the repeal of Section 15-A of the Esch-Cummins act, and especially favor revising the act so as to restore to the state railway commissions their former power.

4. Whereas, it has been proposed to repeal the entire Cummins-Esch act, which would involve killing legislation providing for the federal control of security issues and certain other valuable features for which we have fought, it is our firm conviction that such action would be unwise. Therefore, be it

Resolved, That we urge our representatives in congress not to ask for the repeal of the entire law, but for the amendment of the same as to those features which are wrong.

5. We advocate legislation and agencies looking toward an improved credit mechanism for farmers, and especially commend:

(a) Intermediate credit legislation as is provided in such bills as the Capper and Lenroot bills.

(b) Legislation permitting more general use of the federal reserve system in the rediscounting of agricultural paper, which should run for at least nine months.

(c) The Iowa Farm Credit Corporation.

(d) The Iowa Rural Credits Commission, which will report early in 1923 to the Iowa legislature.

6. We are unalterably opposed to the ship subsidy bill which is now before the senate.

7. Whereas, the just claims and needs of our great agricultural industry call for intelligent, sympathetic and systematic study and support in congress, we express our endorsement of the "agricultural bloc," commend their past efforts and urge them to continue their helpful work in the future.

8. We protest most emphatically against any and all proposals to limit the sphere of the United States Department of Agriculture by the removal of any of its bureaus to other departments.

9. We express our high appreciation of the outstanding services rendered by Secretary Wallace to the agricultural industry and to the nation in his high office.

10. Whereas, the Interstate Commerce Commission is exceedingly busy; and, whereas it has already accepted $18,900,000,000 as a tentative value of the railroads, and therefore has pre-judged the value, we advocate a National Railroad Valuation Commission to relieve the Interstate Commerce Commission of its valuation duties.

11. We are in full accord with the movement under way to prevent the shifting of the tax burden from the railroads of the state onto the owners of farm land, and commend the work of our state officials and the Iowa Farm Bureau Federation toward adjusting this matter.

12. We call upon all taxing and public spending bodies in the state to exert the utmost economy with public funds and to hold down tax levies to the lowest possible figure, and to this end we especially advocate the adoption of the budget system by all taxing agencies at the earliest moment.

13. We urge upon congress such measures as will enable the United States to join with Canada in providing us with economical water transportation through the St. Lawrence and Great Lakes waterway projects.

14. We recommend legislation providing that state funds shall be deposited in each county and drawn upon by the state treasurer for monthly disbursements on a pro rata basis. Surplus public funds should, so far as practical, be available to all communities.

15. We express our appreciation of the splendid work of the Agricultural Economics Section of the Iowa Experiment Station. Its one investigation into hog freights bids fair to save the state of Iowa at least

$100,000. We therefore urge that the farm economics work of the Iowa station be expanded in proportion to its great importance to the state.

16. We recommend that all the costs of construction, maintenance and relocation of primary roads be paid out of the primary road funds.

17. We favor more competition in the packing house business rather than less.

18. We favor restricted immigration until a comprehensive selective system can be put in force.

19. We extend to Prof. John M. Evvard our deepest sympathy in his illness which has made it impossible for him to attend our last two meetings, and express the hope that he will be recovered sufficiently to be with us in 1923.

The President: This, I believe, closes the reports of the committees. This brings us up to the election of officers for the ensuing year. Gentlemen, what is your pleasure? The first is the nomination of men to fill the presidency of this office. Nominations are now in order.

Senator T. C. Cessna: Mr. President, this organization has been headed by our present president for fourteen or sixteen years, and I think we will all agree it has been one of the most efficient organizations that the state has ever had. It has done more for the state generally, and especially the shipper, than any other, and personally I can see no reason why we should change. I nominate Mr. A. Sykes, of Ida Grove, for president. (Several seconds.) Any further nominations, gentlemen?

The President: Now, gentlemen, because I am here I don't want you to feel that there is nobody else that can be nominated. I want you to be perfectly free. If you have got anybody else, nominate him.

Senator Cessna: It has been moved and seconded, gentlemen, that Mr. A. Sykes be re-elected president of this organization for the ensuing year. All in favor of that motion signify it by saying aye. Contrary? Mr. Sykes is elected.

Mr. Ames: I move that Mr. R. M. Gunn be our vice-president. (Motion seconded.)

The President: It has been moved and seconded that R. M. Gunn be elected vice-president for the ensuing year. All favorable to the motion signify it by saying aye. Contrary, no. Mr. Gunn is unanimously elected vice-president for the ensuing year. The next in order is your treasurer.

Mr. White: I move the nomination of our present treasurer. (Motion seconded.)

The President: It has been moved and seconded that Charlie

Goodenow, who has been treasurer of this organization ever since it was formed, be re-elected for the ensuing year. All favorable to his election signify it by saying aye. Contrary, no. Mr. Goodenow, you are unanimously elected. This brings us to the election of the odd-numbered districts—the board of directors.

Senator Cessna: Mr. Chairman, if it is in order I would move that the rules be suspended, that each district get together and elect their own representatives and their own directors, and that we proceed to elect the directors from the odd-numbered districts on the floor of the meeting, re-elect the old directors to succeed themselves. (Motion seconded.)

The President: It has been moved and seconded that the rules be suspended—that which has heretofore been followed in the selection of these directors by districts, and that the old directors who are now occupying those positions in the First, Third, Fifth, Seventh, Ninth and Eleventh districts be elected by this convention to succeed themselves for the ensuing two years. Are you ready for the question?

Mr. E. L. Hill: We have already made an arrangement in our district for a change. This thing can go on with the exception of that district. I think that would be all right.

The President: I don't think we want to make any exception to the rule. If we are to suspend the rules we will make it unanimous. All in favor of the motion signify it by saying aye. Contrary, no. Mr. Hill has been wanting to get out of the harness for some time, and he is just one of the men that we don't want to relieve at this time, I think. I think we are all very well pleased with having Mr. Hill re-elected to succeed himself. I don't think there will be any objections in his district, either, from the reports that I get from that district. (The motion prevailed.)

A motion to adjourn is in order.

Whereupon, at 12:22 p. m., upon motion of Senator T. C. Cessna, duly seconded, put and carried, the convention stood adjourned.

SUGGESTIONS ON THE FEEDING AND CARE OF BABY BEEF CALVES

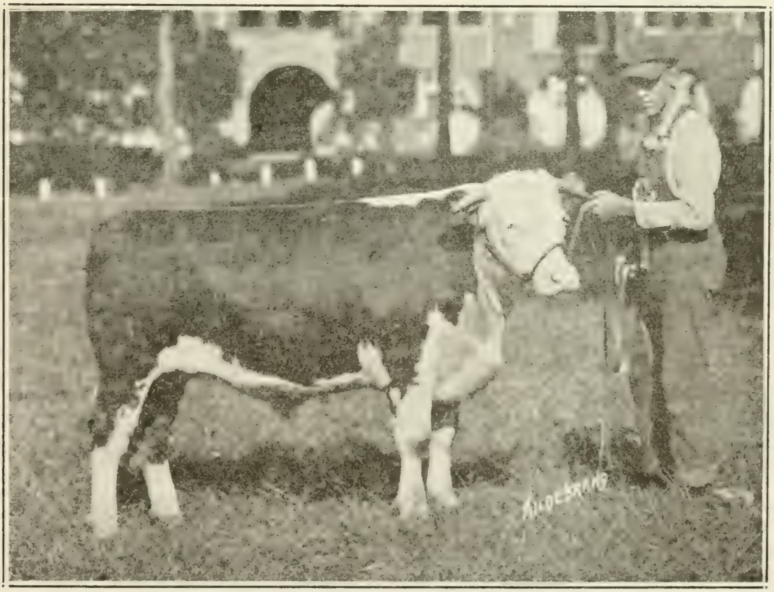
There are three factors to be considered in the feeding of baby beeves, viz: What you feed, how you feed, and how well you make use of the feed. These factors will largely determine your success in the showring and in daily gains.

Feeds—Concentrates and Roughages

In general, feeds may be divided into two groups, concentrates and roughages. The concentrate group includes the grains and such commercial feeds as linseed oil meal, cottonseed meal, bran, etc. The roughage group includes the hays, corn stover, ensilage, grasses and feeds of like nature.

Concentrates furnish the materials for building the tissues, muscle and bone, and also furnish heat for the body. Roughages furnish the same things, only in much smaller amounts in proportion to the bulk, and, in addition, they furnish "body" to the feed, which insures regularity of the digestive functions.

Concentrates, as their name implies, have a large total amount, in proportion to their total bulk, of the muscle building and fat energy producing compounds contained in feeds. Two of the most concentrated concentrates are linseed oil meal and cottonseed meal. It has been definitely proven by experiment that these two concentrates increase daily gains and that the use of one, from the experience of most of the club members, linseed oil meal is to be prefered, is necessary.



First prize Hereford and champion over all, Iowa State Fair, 1922. Shown by Clifford Benson, La Moille, Marshall County.

The feed constituents most desired in concentrates are protein and fat. Proteins furnish the materials from which body tissues—muscles, hair, hide and horn—are built, while fats furnish heat and energy and build up body fat.

Linseed oil meal, pea size or as a meal, is a standard feed with old cattle feeders. It has a high percentage of protein, usually running about 34%. It has the added advantages of being liked by most cattle, and of having a beneficial effect upon the digestive system. It has laxative properties, thus keeping the animals cooled out, and also giving them a smoother appearance by keeping the hair smooth and glossy. As a general rule, not over one and one-half to two pounds per day should be fed at any time.

Frequently club members have trouble getting their calves to eat oil meal. From the experience of a good many, pea-sized meal is to be much preferred over the finely ground meal. A good many make the mistake of trying to get the calf to eat a full feed of oilmeal from the start, and are disappointed when they find that the calf has eaten the rest of the feed and left the oilmeal in the box. Preferably, the calf should be started on a feed of oilmeal very slowly. If you have the pea-sized meal, mix just a very little in with the feed and he probably will eat it along with his corn and oats. Another way is to take a little meal, and when he's licking out the box getting the last of his feed, put it in. He'll be apt to relish it then. If he absolutely refuses it and gets a bit hard in his hide and hair, get some raw (be sure you get raw linseed oil; boiled linseed oil is poisonous) linseed oil and put not over a tablespoonful of it on his feed, mixing it well, of course, once or twice a day.

Cottonseed meal is another old standby, and is sometimes used. It also has a high percentage of protein, from 36% to 44%, depending on the grade, but, unlike linseed oil meal, it has rather a constipating effect upon cattle. For this reason, some other feeds of a laxative nature must be used with it, to offset this property. It is hardly as good a feed as oilmeal for young animals. About the same amounts may be fed as of linseed oil meal.

Wheat bran runs from 12% to 13% protein, and, while rather high in price, is a mighty good feed to add to the ration. It is high in protein, rather bulky, and, being of a laxative nature, keeps the animal's system cooled out, and the coat in good shape. It is widely used among showmen, and may well be used in practically all cases.

Gluten meal, gluten feed, germ oil meal, corn bran, and hominy feed are all feeds made from corn by-products, but they are not widely used among feeders. There are, of course, cases where they have given good results but, where a good part of the ration is made up of corn, it is better to use some other feeds to add variety to the ration.

Ground corn or corn meal is a feed which will no doubt make up a large part of the ration. Because corn is so plentiful this year, and comparatively cheap, a large part of the ration should be made up of corn. We believe it will be better to grind the corn than to feed it shelled. You have probably noticed that where cattle were on full feed, a good deal of the corn passed through the animal and was not digested.

This is caused by the animal not chewing his cud as he should, and so the digestive juices did not have a chance to work on the feed. To offset this loss, you can grind the corn, and even if the calf doesn't chew his feed as he should, the kernel is already broken up and the digestive fluids can act upon it.

However, there is this to be said in regard to shelled corn. You have probably noticed that calves will nibble on shelled corn and whole oats much quicker than they will on ground feed and, for this reason, it may be best to get your calf started on whole grain, changing him later to ground feed. In any case, the corn should be cracked and not finely ground. The fact of the matter is the coarser it is ground the better.

Corn meal contains a good bit of fat, but not so much protein, only around 7% to 8%. Shelled corn has about the same per cent.

Oats differ from corn in being a more bulky and a better balanced feed. They are fairly high in protein, containing up to 10%, and it is of good quality. Because they are a bulkier feed, they are more of a growing feed than corn, which is a fattener. Since your calf is growing as well as fattening, it will be well to add oats to the ration. Where it is possible to grind the oats, it is well to do so, for cattle relish ground oats more than they do whole oats, and the same rule holds true as with corn.

There are a good many roller mills to be found over the state and, if you can have your oats rolled, so much the better. Cattle relish flaky rolled oats.

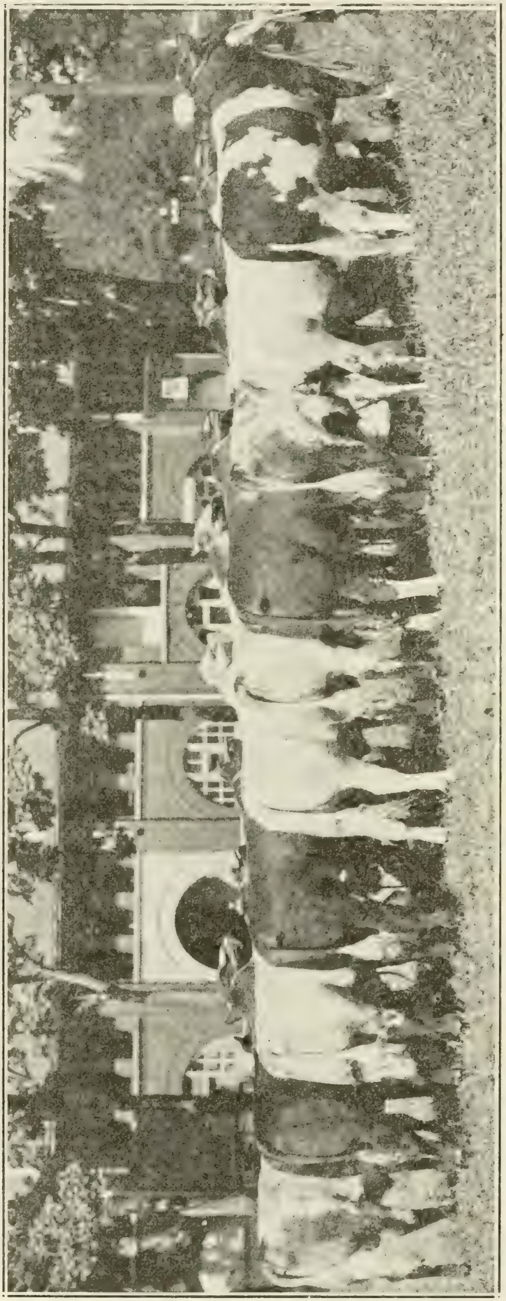
Barley is rather extensively grown in some parts of the state, and where it is available it can be fed to good advantage, especially during the latter part of the feeding period. In feeding value, it is just about the same as corn, but it has a tendency to give the animal more bloom and mellowness of flesh, with less patchiness. Barley, like corn, should be cracked and not ground fine. Rolled barley is much preferable to cracked barley and is better liked by cattle. It is necessary to roll or grind barley because of its being so hard and dry.

Many feeders boil it whole and feed the porridge to the steers during the latter part of the feeding period to stimulate the appetite and add the finish which is not so easily put on with other feeds. Most feeders make it a practice to feed boiled barley at noon. All uneaten barley should be cleaned out of the feed boxes at once and only freshly boiled barley should be used.

Roughages

Some roughage should always be fed cattle. There are factors which will determine the amount fed, as, for instance, an animal with a big middle, which should receive very little hay or other bulky material. Roughages are necessary to give "body," or bulk, to the feed, thus insuring regularity of the digestive functions. Some common roughages are:

Corn silage, made from corn, with the ears left on, contains about one per cent protein and about seventy-three per cent water. It differs from corn fodder in that it does not have such a high percentage of fiber which cannot be digested, and it is a much more palatable feed for



First prize county group of ten, Iowa State Fair, 1922. Won by Marshal County.

animals. It is a very good feed to be fed during the winter months, for it adds succulence to the ration and gives a variety which no other feed has for that time of year. It will be well to let your calf have a good amount of silage along with a good grain ration, where silage is available.

Alfalfa hay is rich, both in protein and in ash, which is a bone and muscle building element. It contains from 10% to 14% of protein, and is relished by all animals. Where you have it available, let your calf have all of it that he wants, unless he eats so much that he will not eat the amount of grain he should.

Clover hay contains from 8% to 10% protein, and is relished by all kinds of stock, unless it be coarse or mouldy. Good, clean clover hay is the chief roughage used in this state, where alfalfa is not grown, and, because it is not quite so "washy" as alfalfa, some feeders prefer it. It is a very good roughage for growing animals.

Timothy hay has only about 3% protein, and is higher in fibre, making it more woody and not so good for a growing animal. It is a good horse hay, but where you have clover, alfalfa, or oat hay, your calf will do better on them than on timothy.

Milk

Baby beef club calves are not allowed milk after they are ten months of age, but up until that time, there is no feed which you can give your calf which will put on as much flesh as good whole milk. Breeders universally consider it the cheapest feed they can get for their younger show stuff. Our most successful baby beef feeders, on a commercial scale, allow the calves to suckle their dams until they are seven to nine months of age. These men figure gains in dollars and cents and we can be well assured that there is a need for such management and here it is: Milk produces "milk" or "baby fat," which you have seen, and which adds "bloom" to the animal. A calf which has been weaned before it is put on a full feed loses this milk fat and, once lost, it can never be regained. It is therefore necessary, if you hope to have a very fine quality of flesh, to let your calf suckle a cow as long as possible, at least until the calf is on full feed.

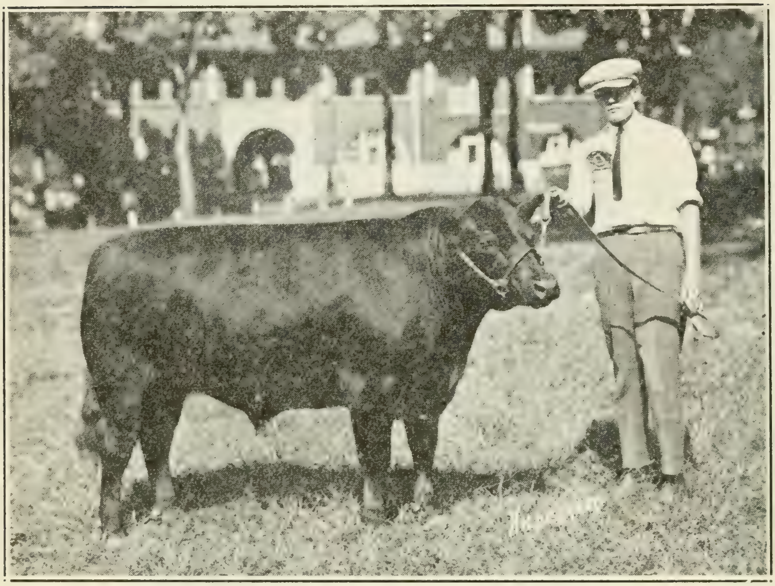
The Balanced Ration

A balanced ration is one in which the proportions of the different classes of feeds are such that they insure the most economical use of the feed by the animal.

A balanced ration is easy enough to talk about, but, as a matter of fact, your calf's likes and dislikes must be consulted, and it would be the rankest folly to feed a perfectly balanced ration if composed of feeds which your calf disliked.

Feeding

As we have just said, the calf's likes and dislikes will need to be consulted to some extent, but what we desire to say is that great care must be exercised by the feeder in keeping his calf on feed. In the first place, two or more calves, fed together, usually do much better than one calf



First prize Angus and reserve champion, Iowa State Fair, 1922. Shown by Dean Dodder, Letts, Muscatine County.

fed by himself. A review of the champions at the state fair proves this conclusively. Second, it may be well to start your calf on whole grain. Ordinarily, calves will eat whole grains much quicker than they will ground feeds. Third, remember to change feeds very gradually, a week to two weeks being usually required. As you know, calves must be started on feed gradually. A good many boys, if the calves were not on feed when the feeding period started, begin by feeding once a day for about a week. Care is taken to see to it that the calf cleans up each feed promptly, and is hungry for the next feed. At the same time, the feed is gradually increased. After about a week of feeding once a day, the day's feed is cut in two and the calf is fed mornings and evenings. When the calf becomes accustomed to the new arrangement, the feed can again be increased and should be gradually added to from then until March, when the calf should be fed three times a day until the end of the feeding period.

Care must be exercised to see that the calf does not go "off feed." It is mighty bad practice to have a lot of feed lying in the box before the calf. Feed him what he'll clean up. When he begins leaving a handful or two, cut down the feed that much, and a little later on begin adding to the feed once again. If he goes clear off feed, a good many miss a feed and give one-fourth to one-third of what he has been getting for the next feed. If he cleans that up, he can rapidly be put on full feed again. If he doesn't care to eat, the feed should be removed from the box. Give left-over feed to the cows. At least, don't mix it with the next feed.

Salt should be fed by mixing a pinch or two into each feed, or by having a box of salt in the stall where the calf can lick it at will.

Suggested Baby Beef Rations

Starting on feed:

Corn, shelled or ground	1½ to 2 lbs.
Oats, ground or whole	2 to 4 lbs.
Bran	1 lb.

All the clover or alfalfa hay he'll eat.

Later in the feeding period:

1.	Corn, ground	2 parts
	Oats, ground	1 part
	Bran	½ to 1 part
	Oilmeal	1 to 1½ lbs. daily
2.	Corn, ground	3 parts
	Oats, ground	3 parts
	Bran	1 part
	Oilmeal	1 to 2 handsful
3.	Corn, ground	2½ to 3 parts
	Oats, ground	2 to 2½ parts
	Bran	1 to 1½ parts
4.	Equal parts of corn, oats and bran, with 1 to 1½ pounds of oil meal daily. Corn and oats may be ground.	
5.	Corn, ground	1½ to 2 parts
	Barley, ground	1 to 1½ parts
	Oats, ground	2 to 2½ parts
	Bran	1½ to 2 parts
	Oilmeal	1 to 1½ lbs. daily

To the above, add what clover or alfalfa hay the calf will eat. If silage is available, it will be well to add about 15 pounds per day to the above rations.

Along in April or May, it may be well to add some molasses to the above. It should be mixed with just enough water to moisten the feed. Never make the feed so wet as to be sloppy. This error was made by a good many club members last year.

Winter Management

In the first place, you do not need a warm stall. Any place which is dry and protected from the rain, wind, and snow is satisfactory. If your calf is securing the amount of feed he should to keep him doing his best, he will be warm enough. His stall should be heavily bedded and cleaned out frequently, preferably every day. Bedding is cheap and cuts down the feed bill.

A calf should have water at least twice a day, although three times a day is better. An even better way is to have it before him at all times.

If your calf is wild or mean, win it over by kind treatment. Let him understand that you are his friend and won't mistreat him, and before long he will respond to it. Perhaps one of the best ways of accomplishing this end is by grooming. Begin by scratching with the hand, later using the brush, and then the comb. As soon as you have won the confidence of your calf, get a halter on him and break him to lead. At first, it will be well to have dad or an older brother steady you on the halter rope, unless you are heavy enough to handle it alone. Don't let the calf get away from you the first time, and you will not have much trouble in breaking him. Teach him to stand squarely on all four feet and to hold his head up well. In other words, give him a good bringing up so he will know how to act when he gets out in company at the county and state fairs.

Summer Management

During the summer months, when the weather is hot and the flies are bad, the calf should be kept in a cool darkened stall during the day, with a light blanket to further protect it from the flies. By taking some pieces of burlap and sewing them together, a very serviceable blanket can be made. Be sure to fasten it under the calf's body and its hind legs, so he will not get it off. There are a number of preparations on the market for keeping flies away. These give more or less satisfaction, but they are not good for the calf's hide and hair, making it rough and coarse —just what you don't want. These preparations can be used to good advantage to spray the walls and bedding, but I would never use them on a calf.

In the summer, when you have a day off now and then, take some clean water and tar soap and give him a thorough washing. Wet him down with a brush first, then lather him well, being careful to keep the soap out of his eyes. Rub the lather in with a brush, and lather again. After this, rinse him off with clean water, and be sure to get all of the soap out. Finish up by rubbing the coat with your hand to get all of the water possible out of his hair, and it will dry more quickly.

There has been a great deal of discussion the past year on the value of pasture for baby beef calves. However, the general opinion seems very much against this practice. I have seen personally a good number of calves which were coming fine until they were turned on pasture, and then they left their feed and didn't "come back" as they should have done. There is little to be said for this system of management. If the calves are to be turned out on pasture, they should be turned out as soon as the pastures begin to come on and sparse pasture at that. The less they get the better. They should be turned out at night only.

About two months before fair time, it will pay you to watch your calf's middle. If he is getting at all paunchy and full in the middle, you will want to cut down on the amount of the hay you are feeding. By doing this, you can give your calf a much trimmer appearance, and, when he is dressed out, there will be a lower percentage of waste. High dressing percentage is something every feeder and packer buyer gives much attention. The neat, trim, high dressing calf always sells higher when he gets to market.

It is well to let your calf have all the hay he wants up to the time mentioned, because it not only furnishes some gain, but it increases his capacity, and makes it possible for him to handle more grain.

Whenever you have any time off, make a call on your calf and take a brush with you. You can work wonders for his hide if you will rub and brush him regularly and well. You will not only clean him, but also loosen his hide and give him that good handling quality—a pliable hide—which is so much desired by judges.

The feet should be looked after from time to time to see that they do not grow too long. If they do, they should be cut off and the soles trimmed down so that the calf stands squarely on all four feet.

If you have a calf with horns, keep an eye on them and see that they do not grow too much up and out. If they have a tendency to do this, secure a pair of horn weights, about one-half pound weights should be heavy enough, unless the horn is very heavy, and then you may use pound weights, and fasten them securely to the horns. See to it that the set screw is on the back side of the horn. Care must be taken not to leave the weights on too long, for, if they are, the horns may break and their appearance be spoiled. A down and in-curving horn is what is desired.

A Few Remedies for Lice and Diseases

Lice. If the calf is troubled with lice, mix up a fairly strong solution of any standard coal tar dip, take a brush, and apply wherever the lice are found. Repeat this treatment three or four times, at intervals of a week or two weeks, and your calf should be rid of lice. In cold weather, it will be better not to apply water to the hide, and to get rid of lice at that time of year many use petrolatum, or some of the oils which are used for medicinal purposes, such as nujol.

Another means of controlling lice is to use the following prescription: One-third ground sabadilla seed; one-third insect powder; one-third sulphur. Dust on.

Warts. If your calf is troubled with warts, they can be removed by mixing sweet oil and sulphur to form a paste and applying two or three times a day until they drop off. Quite often warts are clipped off with shears and the stump painted with iodine.

Pink Eye. Occasionally a calf is bothered with pink eye. This can be controlled by having the following prescription filled by your druggist:

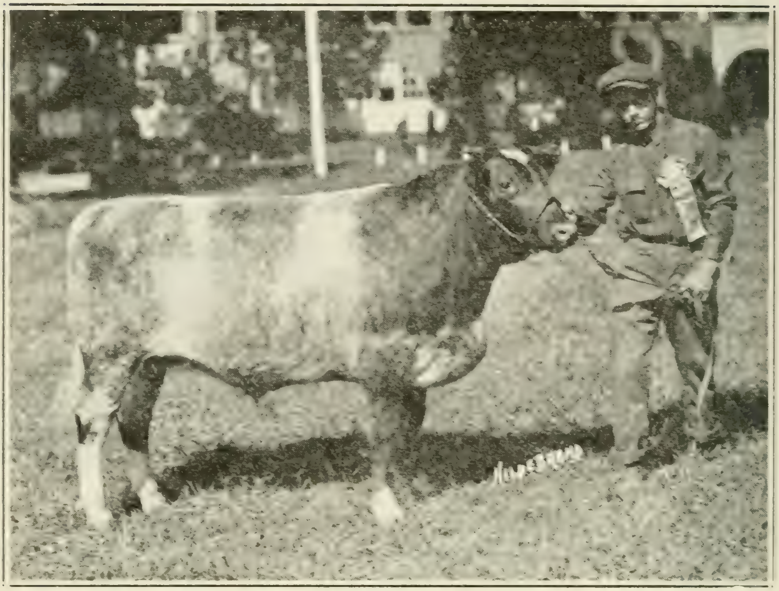
160 grains boric acid
16 grains zinc sulfate

Drop this in the eye twice a day and isolate him from the rest of the cattle.

Some feeders buy yellow oxide of mercuric ointment for pink eye. It comes in small tubes, and a little can be squeezed in the infected eye, under the eyelid, twice a day. The infected animal should always be kept from the rest of the herd, as the disease is highly infectious.

Mange. Mange is caused by a mite which operates under the skin. It is hard to combat, but by scrubbing with soap and water, and then applying dip or coal tar, it can be controlled quite well. Pine tar will not control it.

Ring Worm. Ring worm comes around the eyes or muzzle. Painting with iodine is probably the most satisfactory treatment.



First prize Shorthorn, Iowa State Fair, 1922. Shown by Glen Windom, Nodaway, Adams County.

Scours. Quite often a calf will be troubled with a case of scours and will not be well for a week or more. Most feeders cut down a bit on the feed and some will give a calf a cupful of raw linseed oil or castor oil. Other feeders give a bran mash—about a gallon, by measure, of bran through which hot water has been poured.

Bloat. Sometimes calves will bloat quite badly. In this case, put a ¾-inch rope or a smooth, round bit of wood in the mouth and let him chew on it until the bloat goes down. In bad cases, it may be necessary to tap the left side with a trocar and canula.

Fitting and Showing

If your animal is trained to lead and stand properly, about the only things necessary to do before the show are to wash it, polish the horns, see that its feet are not too long, and use the clippers.

We have already taken up washing, so we need not repeat it. Suffice it to say that the calf should be clean.

A down and in-curving horn, which is not too long, is preferable. About half an inch can usually be safely taken off the end of the horn with a saw or pair of pincers, and a blunt end, which can be nicely rounded off, is the result. To polish the horns, the outer surface is first rasped or filed off, then it may be scraped with a scraper or a piece of broken glass. Be sure to scrape away from the base of the horn and to push the hair back so that you won't cut it short. After the horn has been scraped fairly smooth, a nice finish can be given by rubbing

Three hundred and sixty-seven Baby Beeves, Iowa State Fair, 1922.

with steel wool or a fine grade of sand paper, and then polishing with brown shoe polish, sweet oil, or something of that nature rubbed on with a rag.

The tails of all breeds, with the exception of the Galloway, should be clipped. The switch or brush is always left, beginning eight to ten inches from the tip of the tail, but the tail itself is clipped to the tail head, and if there is any long hair or signs of roughness here, it is also clipped. The heads of Angus are clipped, in addition to the tail, but the heads of Shorthorns, Herefords, and Galloways are never touched.

If the calf has a nice coat, it may be that you will want to curl it, but this is a complicated operation to describe, and seeing it done is the best way to learn.

Showing

Now it may be well to say a few words about showing. There is so much to it that we hesitate a bit at just what to say, and what not to say. To begin with, it is something that you will not learn in a year. Only by long service in the show ring will you ever get to be a first rate show man. There are, however, certain points which it may be well to emphasize here. In the first place, the animal, of course, must be clean. A good appearance goes a long way.

In the second place, mind your own knitting. Don't be gazing all over the place watching the other animals. You will have plenty to do if you keep your animal standing squarely on his feet, and head and back well up.

In the third place, watch the judge, and don't go to sleep on the job, so when the judge motions to lead the calves out and around you will be on your toes and up and coming. This makes more of an impression on the judge than it would seem to do at first glance. In the words of the old Scotchman: "Keep one eye on the judge, and the other on the beast."

If your calf is low or weak in the back, keep turning him around, but arrange these turns when the judge isn't looking at your calf, or the calf on either side. Remember that, if your calf doesn't lead well, you will have just about three times the trouble with him that you would have had otherwise.

And last, but not least, remember you are a cattleman and a gentleman. Always thank the man who hands you the ribbon whether you receive first or last. If you think you might have been up a place or two, don't crab about it. Remember that the judge has more of an opportunity than yourself to see all the points for or against, and take his decision as final. Be a sport, a good loser, and, better yet, a good winner.

Feeding Pureberd Heifers

If you are feeding a heifer in a purebred club, instead of a baby beef, you will want to feed more for growth and not quite so much for flesh. In this case, more oats and bran and less corn should be fed in the grain ration. The same things in starting on feed must be remembered as with a baby beef; starting on grain slowly unless she has already been fed grain, and gradually increasing.

If your heifer will suckle a cow, and you have one to spare, by all means allow her to do so, and you will be surprised at the results. Remember that milk is the cheapest feed you can get for a young calf.

PART VIII

Annual Report of the Iowa Weather and Crop Service Bureau of 1922

CHAS. D. REED, Director

The Iowa Weather and Crop Service was established by an Act passed by the Twenty-third General Assembly, and approved by the Governor April 25, 1890.

The object of the Service is to co-operate with the U. S. Weather Bureau in collecting crop statistics and meteorological data, and more widely disseminate the weather forecasts and storm and frost warnings for the producers and shippers of perishable products, and to promote general knowledge of meteorological science and the climatology of the State.

For convenient reference and comparison with past and future years, this report contains the summaries of the weekly, monthly and annual bulletins of the Iowa Weather and Crop Service in co-operation with the U. S. Weather Bureau and the United States Bureau of Agricultural Economics for the year 1922.

The regular meteorological, climatological and crop statistical work was maintained efficiently, though under great handicap from frequent resignation of employees, due to low salaries paid by the Government. The Thirty-ninth General Assembly placed the supervision of agricultural statistics collected by assessors, under the direction of this office, but failed to provide adequate funds to fully carry out the law for which a minimum of $10,000 was asked to cover all salaries, special clerk hire, traveling expenses, and office equipment, including all of the work heretofore done by county auditors on agricultural statistics. As only $7,500 were appropriated, it was necessary to ask for volunteers among the auditors to do the work without compensation. About half of them responded, otherwise the work could not have been done. Being voluntary work, it was done at the convenience of the auditors which caused a delay of 30 days in publishing the statistics. However, the bulletin containing the statistics was mailed about August 1, which is 60 days earlier than last year and the earliest ever mailed. Adequate funds would hasten publication at least 30 days and bring added improvement from close contact with more of the assessors.

Publications were distributed as follows: Monthly Climatological Data, about 17,000 copies; Weekly Weather-Crop Bulletins, about 20,000; Daily Weather Forecast Cards, to 1,593 addresses. Of the bulletin, "Iowa Monthly Crop Report," about 5,100 copies were distributed each month. Five hundred copies of the Monthly Climatological Data are distributed each month through the United States Department of Agriculture, Weather Bureau, to scientific institutions and libraries in this and foreign counties. In cooperation with the U. S. Bureau of Agricultural Economics, about 4,800 mimeographed copies of special monthly crop bulletins were issued to the press.

Daily weather forecasts were distributed by telegraph at the expense of the U. S. Weather Bureau to 64 towns. From these towns the forecasts are made available by free telephone to 38,263 rural subscribers, and 145,801 town subscribers. Much attention was given to accuracy and promptness in the transmission of forecasts by telegraph and telephone.

Frost warnings are sent when necessary during the fruit blooming season to all orchardists in the State prepared to use orchard heaters and who make application in advance for the service.

Radio telephone distribution of daily weather forecasts was begun by the Electrical Engineering Department, Iowa State College, Ames, Iowa early in June, 1922. Forecasts based on observations taken throughout the United States at 7:00 a. m. (Central Standard Time) are broadcast from Ames (WOI) at 9:30 a. m. and 12:40 p. m. Forecasts based on similar observations at 7:00 p. m. are broadcast at 9:30 p. m.

Forecasts are also broadcast from WOC (Davenport) at 11:00 a. m.; 12:30 p. m.; and 9:40 p. m.

WEAB (Fort Dodge) at 10:00 a. m.

WKAA (Cedar Rapids) 12:15 p. m. and 9:45 p. m.

WEAU (Sioux City) 10:15 a. m.

Special warnings are sent from various stations between 4:00 p. m. and 5:00 p. m. All broadcasting is done at 485 meters wave length. Most any of the above stations can be heard anywhere in the State by the use of audion bulb receivers; and at a radius of 50 to 75 miles from the sending stations by the use of crystal receivers.

Increased transportation by automobile and motor truck has created a great demand for information as to the condition of roads. From April 1 to September 30, daily rainfall reports are telegraphed at the expense of the U. S. Weather Bureau from 26 Iowa towns to the central station at Des Moines. Many local and long-distance calls are received as to desireable detours to avoid wet areas. A special Highway Weather Service was maintained by the U. S. Weather Bureau Offices in Charles City and Dubuque. This is very popular, but cannot be conducted satisfactorily without more funds. In fact, the work was discontinued at Davenport, Des Moines, and Sioux City because of the failure of Congress to provide adequate salaries. Frequent resignations of trained employees made it impossible to continue this work.

CLIMATOLOGY OF THE YEAR, 1922

The year, 1922, with a mean temperature of 50.2, was next to the warmest of the 33 years of State wide record. The average daily excess of temperature above the normal was 2.8°. Each of the months were above normal except July which was 2.6° below which made the midsummer season pleasant. Of the 28 consecutive months ending with December, 1922, 26 were above normal; and during this period the average daily temperature was 3.7° above normal—a most remarkable record. Precipitation averaged 29.98 inches, or 1.99 inches below normal. Snowfall,. 13.5 inches, is a new low record for a calendar year, though the snowfall of the three winter months of 1921-1922 was only 9.5 inches. Wind movement averaged slightly less than normal, but unusual gales occurred on November 5th and 30th.

Crop production was unusually good. Corn was next to the largest crop of record, small grains were satisfactory, potatoes very good; apples unusually good, and other fruits above the average.

Barometer (reduced to sea level). The average pressure of the atmosphere for the year was 30.04 inches. The highest pressure was 30.97 inches, at Sioux City on February 28. The lowest pressure was 28.92 inches, at Des Moines, on April 8. The range for the State was 2.05 inches.

Temperature. The mean temperature for the State was 50.2° or 2.8° above normal. The highest annual mean was 54.2°, at Keokuk, Lee County. The lowest annual mean was 46.1°, in Dickinson County near Milford. The highest temperature reported was 104°, at Inwood, on June 23. The lowest temperature reported was −29°, at Charles City, Floyd County, on January 6 and at Mason City, Cerro Gordo County, on January 24. The range for the State was 133°.

Precipitation. The average amount of rainfall and melted snow for the year was 29.98 inches, or 1.99 inches less than normal, and 2.05 inches less than the average for 1921. The greatest amount at any station was 44.20 inches, at Mt. Ayr, Ringgold County, and the least amount was 19.08 inches, in Dickinson County, near Milford. The greatest monthly precipitation was 11.72 inches, at Mt. Ayr, Ringgold County, in July. The least amount was a trace at Cumberland, Glenwood, Harlan, and Thurman in southwest Iowa, in December. The greatest amount in any 24 consecutive hours was 5.83 inches, at Atlantic on August 30. Measurable precipitation occurred on an average of 84 days, 2 days less than in 1921 and one day less than normal.

Snowfall. The average amount of snowfall was 13.5 inches. The greatest amount reported from any station was 38.9 inches at Sioux Center, Sioux County, and the least amount was 2.0 inches at Bonaparte, Van Buren County. The greatest monthly snowfall was 23.0 inches at Rockwell City, Calhoun County, in January.

Wind. The prevailing direction of the wind was from the south. The highest velocity reported was 67 miles an hour from the south at Sioux City, Woodbury County, on June 8.

Sunshine and Cloudiness. The average number of clear days was 187; partly cloudy, 89; cloudy, 89; as against 171 clear, 99 partly cloudy, and 95 cloudy days in 1921. The average percentage of the possible amount of sunshine was 62 or about 1 per cent more than the normal.

MONTHLY SUMMARIES

JANUARY

January as a whole was a pleasant month, though subject to an unusual number of fluctuations above and below the normal, and there were some great extremes in temperatue, particularly on the 6th, when the minimum temperature ranged from 29 degrees below zero at Charles City to 11 above at Keokuk. The mean temperature averaged somewhat above normal, with an excess at every station except Mason City, and the mean was least over northern districts, where the ground was snow covered the entire month, except the first three days, and gradually increased to the south where the ground was covered on an average of less than 10 days. Zero weather was reported throughout the State except a small area along the Mississippi River in the extreme southeast corner.

Precipitation averaged slightly below normal, being slightly above normal over the northern division and somewhat below in the central and southern divisions. More than 75 per cent of the monthly total occurred during the storm of the 4th-5th, which was in the form of snow over the northern half of the State and rain over the southern half. The snowfall during this storm ranged as high as 14 inches and in sections drifted enough to interfere with wagon and automobile traffic but not enough to seriously delay rail traffic. Over the southern division and portions of the central division the precipitation in this storm was in the form of rain, which froze to all exposed surfaces. This general icy condition continued for several days, and in protected places, till the close of the month. Conditions were generally favorable for the usual outdoor activities and considerable building was in progress which was interrupted for but short intervals. There was sufficient cold weather to make ice of the desired thickness and by the close of the month a good harvest had been completed under the most favorable conditions. The lack of snow cover, the icy condition that followed the storm of the 4th-5th, and the alternate freezing and thawing, later, are thought to have seriously injured winter wheat and young clover over the southern and portions of the central divisions. At the end of the month more than half the State was without snow. Roads were in good condition, with sleighing nearly the entire month over the northern division. The health of stock continued good.

Pressure. The mean temperature (reduced to sea level) for the State was 30.20 inches. The highest recorded was 30.95 inches, at Dubuque, on the 23rd and the lowest was 29.44 inches at Davenport, on the 4th. The monthly range was 1.51 inches.

Temperature. The mean temperature for the State, as shown by the records of 97 stations, was 19.8°, or 1.9° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 15.6°, or 1.0° higher than the normal; Central, 20.5°, or 2.3° higher than normal; Central, 20.5°, or 2.3° higher than normal; Southern, 23.4°, or 2.5° higher than the normal. The highest monthly mean 25.8° at Centerville, and the lowest monthly mean 13.2° at Charles City. The highest temperature reported was 61°, at Harlan, on the 1st, and the lowest was 29° at Charles City on the 6th and Mason City on the 24th. The temperature range for the State was 90°.

Humidity. The average relative humidity for the State at 7 a. m. was 80 per cent and at 7 p. m. was 69 per cent. The mean for the month was 74 per cent, which is 8 per cent below the normal. The highest monthly mean was 87 per cent, at Charles City, and the lowest was 66 per cent, at Keokuk.

Precipitation. The average precipatation for the State, as shown by the records of 98 stations, was 0.89 inch, or 0.16 inch less than normal. By divisions the averages were as follows: Northern, 0.88 inch, or 0.04 inch more than normal; Central, 0.88 inch, or 0.23 inch less than the normal; Southern, 0.92 inch, or 0.27 inch less than the normal. The greatest amount, 2.30 inches, occurred at Rockwell City, and the least, 0.32 inch, at Postville. The greatest amount in any 24 consecutive hours, 1.80 inches, occurred at Mason City, on the 4th.

Snowfall. The average snowfall for the State was 5.3 inches, or 1.6 inches less than the normal. The greatest amount, 23.0 inches, occurred at Rockwell City, and the least a trace at Chariton and Pella.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported from a regular Weather Bureau Station was at the rate of 47 miles per hour, from the northwest, at Sioux City on the 4th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 63, or 13 per cent more than the normal. The per cent of the possible amounts at the several Weather Bureau Stations was as follows: Charles City, 43; Davenport, 72; Des Moines, 64; Dubuque, 67; Keokuk, 72; Sioux City, 55; Omaha, Neb., 68.

Miscellaneous Phenomena. Aurora: 5th, 6th, 24th. Fog, dense: 4th, 10th, 12th, 16th, 21st, 28th, 30th, 31st. Hail: 4th, 31st. Halos (Lunar or Solar): 4th, 8th, 10th 11th, 17th, 18th, 19th, 29th. Parhelia: 5th, 19th. Sleet: 3d, 4th, 14th, 29th, 30th, 31st. Thunderstorms: 4th, 5th.

Rivers. Low to moderate stages prevailed on the Missouri River, with considerable fluctuation due to ice gorges. Low and nearly stationary stages prevailed on the Mississippi and all interior rivers during the entire month. The ice on the Mississippi and interior rivers increased gradually till the end of the month.

COMPARATIVE DATA FOR THE STATE—JANUARY

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	19.7	+1.8	61	—27	2.03	+0.98	3.46	0.35	------	------	----	---	----
1891	26.0	+8.1	58	— 4	1.75	+0.70	3.99	0.61	------	4	13	7	11
1892	15.3	—2.6	76	—38	1.09	+0.04	3.13	0.10	6.9	5	16	9	6
1893	9.3	—8.6	54	—34	0.74	—0.31	3.20	0.13	6.9	6	11	9	11
1894	19.3	+1.4	69	—37	1.09	+0.04	2.24	0.31	6.0	5	14	9	8
1895	13.6	—4.3	68	—31	0.85	—0.20	2.65	0.09	8.7	4	15	7	9
1896	23.4	+5.5	68	—20	0.48	—0.57	2.10	T.	2.8	3	10	10	11
1897	17.2	—0.7	66	—30	2.01	+0.96	6.16	0.15	8.2	7	12	7	12
1898	23.4	+5.5	52	—11	1.60	+0.55	5.32	T.	12.6	5	15	6	10
1899	19.8	+1.9	68	—34	0.28	—0.77	1.15	T.	1.5	3	15	10	6
1900	25.6	+7.7	66	—20	0.53	—0.52	2.47	T.	2.3	3	16	7	8
1901	23.7	+5.8	60	—21	0.74	—0.31	2.34	0.04	6.2	4	14	9	8
1902	22.4	+4.5	63	—31	0.88	—0.17	2.83	0.19	9.4	4	17	8	6
1903	23.0	+5.1	60	—12	0.28	—0.77	1.46	T.	2.0	4	13	7	11
1904	14.0	—3.9	57	—32	1.18	+0.13	3.68	0.02	6.1	6	12	8	11
1905	11.2	—6.7	56	—30	0.91	—0.14	1.82	0.12	11.1	7	14	7	10
1906	24.6	+6.7	69	—19	1.52	+0.47	4.71	0.28	11.3	5	14	6	11
1907	18.8	+0.9	68	—22	1.52	+0.47	5.30	0.10	6.0	7	8	7	16
1908	24.9	+7.0	60	—18	0.44	—0.61	1.50	0.06	4.6	2	17	8	6
1909	21.2	+3.3	72	—25	1.66	+0.61	3.74	0.41	7.8	6	9	6	16
1910	18.1	+0.2	56	—35	1.57	+0.52	3.15	0.55	12.6	6	13	7	11
1911	20.2	+2.3	66	—35	0.97	—0.08	3.73	0.11	7.3	5	9	8	14
1912	4.2	—13.7	49	—47	0.53	—0.52	1.90	T.	5.5	5	14	7	10
1913	20.9	+3.0	62	—25	0.77	—0.28	2.05	0.04	7.2	5	14	9	8
1914	27.8	+9.9	64	—10	0.88	—0.17	2.34	0.27	5.1	5	11	8	12
1915	17.5	—0.4	59	—32	1.63	+0.58	3.15	0.10	7.3	8	13	8	10
1916	17.8	—0.1	63	—34	2.62	+1.57	6.07	0.85	7.2	10	12	6	13
1917	17.0	—0.9	60	—28	0.83	—0.22	2.07	0.17	7.2	4	17	8	6
1918	8.6	—9.3	53	—35	1.02	—0.03	2.79	0.26	11.2	7	13	8	10
1919	26.8	+8.9	64	—32	0.24	—0.81	0.86	T.	2.8	2	20	5	6
1920	16.7	—1.2	58	—26	0.42	—0.63	1.05	T.	4.6	4	12	8	11
1921	28.4	+10.5	67	— 9	0.51	—0.54	1.92	0.10	4.1	4	11	7	13
1922	19.8	+ 1.9	57	—29	0.89	—0.16	2.30	0.32	5.3	4	17	6	8

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

FEBRUARY

February, like January, was subject to a large number of sudden temperature changes, but on the whole a very pleasant month with no periods of cold weather of long duration. The temperature averaged above normal except over a small area in the northwest corner and the departures increased uniformly to the south and southeast, the greater departures in the south being due principally to a storm that crossed the State on the 22d, which gave usually high temperatures over all the southern division and much of the central, while over a large portion of the northern division the maximum did not go much above freezing.

The precipitation averaged above normal over all divisions, though there was a deficiency over about half of the central and southern divisions. Most of the precipitation occurred from the 21st to the 23d, in connection with the storm that crossed the State on the 22d. Over a large area in the northeast portion the precipitation was excessive and as a result the worst flood ever experienced this early in the season occurred. The storm was accompanied by severe thunderstorms generally throughout the State and there was considerable loss to stock and buildings from lightning, but the greatest damage was due to floods, which affected most of the northeast section, being especially severe in Allamakee, Clayton, Winneshiek, Fayette, Bremer and Delaware counties. Over practically all of this area unusually heavy rainfall occurred, and, owing to the frozen condition of the ground, all the water soon found its way to the streams, which were soon out of banks, and many miles of roads and railroads were covered with from three to five feet of water. All railroads were damaged by having bridges washed out and road beds injured, but the Chicago, Milwaukee & St. Paul Railroad from West Union to Turkey River Junction was hardest hit, and the stage at points along the Turkey River was the highest ever known. Over this strip 24 railroad bridges were washed out and several miles of track was washed away, and it was necessary to suspend railroad traffic for 10 days. No railroad in the flooded area was able to maintain schedules. Many families were forced to vacate their homes and in Independence 10 blocks were flooded. There was also considerable damage from ice, as the storm terminated in a glaze storm, and as a result telephone, telegraph and electric wires were put out of commission and industries that depended on electric current for power were forced to suspend till the damage could be repaired and many homes had to resort to primitive lighting methods. Many valuable fruit and shade trees were ruined by the weight of the ice.

The snowfall was the least ever recorded in February since records have been kept, the average for the State being but 1.3 inches, and many stations reported no snow whatever, and there was less snow cover than in any previous February. In the winter wheat section there was practically no snow protection during the entire month, but the injury from freezing was apparently less than could be expected under the circumstances. Clover was injured somewhat in some of the northern counties.

The weather was generally favorable for the outdoor activities. Roads were unusually good for the season with very little sleighing except in the extreme northern portion, and until the general storm of the 21st-23rd, many roads in the southern and central divisions were dusty.

Pressure. The mean pressure (reduced to sea level) for the State was 30.14 inches. The highest recorded was 30.97 inches, at Sioux City on the 28th, and the lowest was 29.24 inches, at Charles City, on the 1st. The monthly range was 1.73 inches.

Temperature. The mean temperature for the State, as shown by the records of 96 stations, was 23.7°, or 3.2° higher than normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 18.4°, or 1.3° higher than the normal; Central 24.7°, or 4.0° higher than the normal; Southern, 28.0°, or 4.4° higher than the normal. The highest monthly mean was 31.3°, at Burlington, and the lowest 14.8°, at Rock Rapids. The highest temperature reported was 70°, at Clarinda and Mt. Ayr, on the 21st, and the lowest was -20°, at Inwood, on the 13th. The temperature range for the State was 90°.

Humidity. The average relative humidity for the State at 7 a. m. was 79 per cent, and at 7 p. m. it was 66 per cent. The mean for the month was 72 per cent, or 8 per cent lower than the normal. The highest monthly mean was 85 per cent, at Charles City, and the lowest was 66 per cent, at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 97 stations, was 1.59 inches, or 0.44 inch greater than the normal. By divisions the averages were as follows: Northern, 1.96 inches, or 1.05 inches more than the normal; Central, 1.43 inches, or 0.23 inch more than the normal; Southern, 1.39 inches, or 0.04 inch more than the normal. The greatest amount, 4.56 inches, occurred at Fayette, and the least, 0.40 inch at Spencer. The greatest amount in any 24 hours, 3.20 inches, occurred at Fayette, on the 21st-22d.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau Station was 55 miles per hour, from the west, at Sioux City, on the 1st.

Snowfall. The average snowfall for the State was 1.3 inches, or 6.1 inches less than normal. The greatest amount, 7.4 inches, occurred at Rock Rapids, and there were 21 stations that reported only traces and 10 stations no snow whatever. The snowfall for the State was the least ever recorded, being just half of the least amount previously recorded, which was in 1902.

Rivers. Low and nearly stationary stages prevailed on the Mississippi and interior rivers until after the general storm of the 21st-22nd, when a sharp rise occurred in the Mississippi and a high stage continued through the rest of the month. Ice gorges caused local floods on many interior rivers and bridges were threatened by ice jams which had to be dynamited. In the northeast portion of the State high water and ice caused great damage. Low and nearly stationary stages prevailed on the Missouri the entire month.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 65, or 9 per cent more than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 46; Davenport, 63; Des Moines, 73; Dubuque, 64: Keokuk, 68; Sioux City, 67; Omaha, Nebr., 73.

Miscellaneous Phenomena. Aurora: 12th, 14th.. Birds (migration of): Columbus Junction, robins, 16th; Earlham, blue birds, 21st, black birds, 22d. Fog: 1st, 9th, 19th, 21st, 22d. Hail: 1st, 21st, 22d, 23d. Halos (lunar and solar): 4th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 17th, 22d, 23d, 26th 27th, 28th. Meteor: 12th. Sleet: 1st, 4th, 5th, 18th, 21st, 22d, 23d, 26th, 27th. Thunderstorm: 19th, 21st, 22d.

COMPARATIVE DATA FOR THE STATE—FEBRUARY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	26.0	+5.5	67	—24	0.83	—0.32	2.18	0.11	------	------	----	----	----
1891	19.4	—1.1	70	—31	1.16	+0.01	2.41	0.55	------	3	13	7	8
1892	28.1	+7.6	68	—20	1.20	+0.05	2.18	0.12	5.0	6	6	7	16
1893	16.4	—4.1	60	—28	1.39	+0.24	2.91	0.06	8.1	6	10	8	10
1894	19.7	—0.8	60	—19	0.89	—0.26	2.41	T.	8.4	3	16	8	4
1895	16.4	—4.1	73	—33	0.49	—0.66	1.34	0.02	3.3	4	13	9	6
1896	27.4	+6.9	78	—13	0.71	—0.44	2.40	0.04	5.4	4	12	9	8
1897	24.7	+4.2	61	—24	0.89	—0.26	1.81	0.22	8.0	5	6	10	12
1898	24.2	+3.7	62	—18	1.20	+0.05	3.65	0.10	7.8	5	10	9	9
1899	12.2	—8.3	75	—40	0.89	—0.26	4.32	0.12	7.1	5	11	10	7
1900	14.8	—5.7	60	—27	1.30	+0.15	4.57	0.18	9.9	6	10	8	10
1901	17.5	—3.0	49	—21	1.01	—0.14	3.00	0.12	9.7	4	15	7	6
1902	17.6	—2.9	62	—21	0.73	—0.42	2.39	0.02	2.6	4	13	8	7
1903	19.8	—0.7	56	—21	1.18	+0.03	3.25	0.30	7.9	4	13	7	8
1904	14.8	—5.7	70	—26	0.41	—0.74	1.99	T.	4.5	4	10	9	10
1905	12.8	—7.7	69	—41	1.57	+0.42	2.97	0.44	15.5	7	14	6	8
1906	23.6	+3.1	66	—32	1.29	+0.14	2.91	0.20	6.1	5	14	7	7
1907	25.0	+4.5	65	—31	0.71	—0.44	1.95	0.06	4.6	4	14	6	8
1908	24.3	+3.8	59	—16	1.69	+0.54	3.95	0.23	8.9	6	12	6	11
1909	26.2	+5.7	62	—26	1.54	+0.39	4.72	0.30	7.7	5	11	6	11
1910	17.8	—2.7	58	—21	0.46	—0.69	2.09	T.	4.0	3	14	8	6
1911	27.3	+6.8	71	—13	2.76	+1.61	5.46	0.50	7.0	6	12	6	10
1912	18.1	—2.4	57	—30	1.21	+0.06	3.25	0.04	11.2	5	10	9	10
1913	20.2	—0.3	70	—24	0.82	—0.33	2.39	0.07	7.3	4	14	7	7
1914	16.8	—3.7	59	—29	0.87	—0.28	1.99	0.32	9.2	6	10	9	9
1915	29.1	+8.6	62	— 8	2.93	+1.78	5.39	0.43	9.4	9	9	5	14
1916	19.0	—1.5	62	—32	0.55	—0.60	1.38	0.05	6.0	4	14	8	7
1917	15.2	—5.3	68	—37	0.36	—0.79	1.19	T.	3.5	3	14	8	6
1918	23.0	+2.5	70	—36	0.95	—0.20	2.10	0.09	6.0	5	14	7	7
1919	24.9	+4.4	65	—16	2.42	+1.27	4.12	1.32	9.9	8	11	5	12
1920	24.0	+3.5	59	—22	0.56	—0.59	1.75	0.04	4.1	5	9	6	14
1921	31.0	+10.5	76	— 5	0.77	—0.38	2.00	T.	6.5	5	13	7	8
1922	23.7	+ 3.2	70	—20	1.59	+0.44	4.56	0.40	1.3	4	14	7	7

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

THE WINTER OF 1921-1922.

The mean temperature for the three winter months was 23.9°, which is 3.1° above the normal for the State, and 4.7° lower than the mean for 1920-1921, which was the warmest winter ever recorded in the State. The highest temperature reported was 70°, at Clarinda and Mt Ayr, on February 21st. The lowest temperature reported was −29°, at Charles City, on January 6th, and Mason City, on January 24th.

The average monthly precipitation for the State was 1.17 inches and the average total precipitation was 3.50 inches or, 0.08 inch more than the winter normal. The average total snowfall, unmelted, was 9.5 inches, the least ever recorded, which is 11.0 inches below the normal, and 8.5 inches less than the winter of 1920-1921. The least ever recorded heretofore was 12.0 inches, during the winter of 1906-1907.

The total number of days with .01 inch or more of precipitation was 13, or 1 less than the winter of 1920-1921. The average number of clear days was 45; partly cloudy, 22; cloudy, 23, as compared with 34 clear days, 22 party cloudy days and 34 cloudy days during the winter of 1920-1921.

MARCH

The mild weather that prevailed throughout the winter continued during March and the usual features that characterize this month were lacking. Several storms of more than ordinary severity passed near the limits of the State, but they were generally accompanied by very little wind and less rain and snow than usual. The exception was the storm that passed immediately south of the State on the 19th, and the only damage of consequence reported occurred during the passage of this storm, which crippled telephone and telegraph service in the central and west-central portions of the State. It was necessary to route telegrams between Des Moines and Omaha in a roundabout way and telephone service was entirely suspended until the broken poles and wires could be replaced.

The temperature averaged 5.0° above normal, which is the greatest excess since the present series of months with the temperature above normal began in December. The month opened cold and the lowest temperature generally occurred on the 2d, with a minimum of zero, or lower, over most of the northern division and slightly above zero over the central and southern divisions. The temperature rose above normal on the 3d, and except on an occassional day, continued above normal till the 26th, when a moderately cold period set in and the rest of the month was slightly below normal.

The precipitation for the State was slightly above normal and was more uniform both as to distribution and the time of occurrence than usual, but over the greater portion of the State more than half of the monthly total occurred during the storm of the 18th-19th.

The general weather conditions were favorable for plant development, but farm work was somewhat retarded on account of the soil being too wet to work and at the end of the month no spring seeding had been done except in a few small, scattered areas. Fruit buds had not developed as far as usual and at the end of the month all buds were apparently uninjured. Winter wheat and grass were making good growth and it will be necessary to plow up very little winter wheat. Building operations made an active start under very favorable conditions.

Pressure. The mean pressure (reduced to sea level) for the State was 30.04 inches. The highest recorded was 30.81 inches, at Sioux City on the 1st, and the lowest 29.26 inches, at Charles City, on the 6th.

Temperature. The mean temperature for the State, as shown by the records of 98 stations, was 38.3°, or 5.0° above the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 35.8°, or 5.3° higher than normal; Central, 38.8°, or 5.3° higher than normal; Southern, 40.4°, or 4.5° higher than the normal. The highest monthly mean was 43.6°, at Fairport, and the lowest monthly mean was 33.6°, at Milford. The highest temperature reported was 74°, at Burlington, on the 23d, and the lowest was –5°, at Fayette, on the 2d. The temperature range for the State was 79°.

Humidity. The average relative humidity for the State at 7. a. m. was 81 per cent, and at 7 p. m. it was 68 per cent. The mean for the month was 74 per cent, which is practically normal. The highest monthly mean was 81 per cent, at Charles City, and the lowest was 72 per cent, at Sioux City.

Snow. The average snowfall for the State was 3.0 inches, or 2.3 inches less than the normal. The greatest amount, 9.0 inches occurred at Alta, and the least, a trace, at Bonaparte, Corning and Pella.

Precipitation. The average precipitation for the State, as shown by the records of 101 stations, was 1.97 inches, or 0.20 inch more than the normal. By divisions the averages were as follows: Northern, 1.39 inches, or 0.14 inch less than the normal; Central 2.00 inches, or 0.13 inch less than the normal; Southern, 2.52 inches, or 0.60 inch less than the normal. The greatest amount, 3.73 inches, occurred at Chariton, and the least, 0.76 inch, at Independence and Spencer. The greatest amount in any 24 consecutive hours, 2.18 inches, occurred at Belle Plaine on the 19th.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported from a regular Weather Bureau Station was at the rate of 46 miles per hour, from the northwest, at Sioux City on the 25th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 49, or 9 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 46; Davenport, 42; Des Moines, 46; Dubuque, 47; Keokuk, 45; Sioux City, 55; Omaha, Nebr., 62.

Miscellaneous Phenomena. Aurora: 1st, 13th, 14th. Birds (migration of): Alton, meadow larks, 12th, robins, 13th; Corydon, robins, 5th, blue birds, 13th, black birds, 23d; Jefferson, meadow larks and robins, 4th; Nora Springs, robins 21st; Oskaloosa, blue birds and robins, 4th; Pocahontas, meadow larks, 3d, robins, 17th. Fog: 3d, 6th, 7th, 19th, 24th, 27th, 30th. Hail: 10th, 14th, 18th, 19th, 24th, 25th. Halos (lunar and solar): 2d, 4th, 5th, 6th, 9th, 10th, 12th, 14th, 25th. Parhelia: 10th, 13th. Sleet: 6th, 9th, 17th, 18th, 20th, 25th 28th 29th 31st. Thunderstorms: 6th, 10th, 18th, 19th, 23d, 24th, 25th.

Rivers. Moderate stages with a general rising tendency prevailed on the Mississippi River and most interior streams with the crest stages after the general rains on the 18th-19th. The Missouri was subject to numerous fluctuations with a sharp rise at the beginning of the third week. The ice moved out of the upper reaches of the Mississippi River on the 6th and on the 13th ice in the Missouri broke up doing very little damage.

COMPARATIVE DATA FOR THE STATE—MARCH.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	28.0	—5.3	75	—24	1.57	—0.20	3.67	0.32	------	------	----	----	----
1891	26.8	—6.5	66	—19	2.60	+0.83	4.58	1.33	------	10	6	8	17
1892	31.9	—1.4	84	— 6	2.22	+0.45	4.58	0.57	3.9	6	11	8	12
1893	31.8	—1.5	84	— 8	2.14	+0.37	4.40	0.64	4.0	8	9	11	11
1894	41.0	+7.7	84	— 5	2.03	+0.26	4.52	0.26	2.7	6	13	10	8
1895	34.4	+1.1	94	—11	0.83	—0.94	2.60	0.22	2.9	4	16	8	7
1896	30.9	—2.4	81	—12	1.10	—0.67	3.99	0.16	5.4	5	12	9	10
1897	32.0	—1.3	72	—22	2.39	+0.62	6.16	0.29	5.5	8	9	8	14
1898	37.5	+4.2	72	—	1.94	+0.17	6.21	0.33	3.7	6	12	9	10
1899	23.0	—10.3	75	—1	1.62	—0.15	5.90	0.37	8.0	6	7	12	12
1900	30.7	—2.6	81	—1	2.06	+0.29	5.15	0.45	6.6	5	12	9	10
1901	34.2	+0.9	76	—	2.64	+0.87	5.25	0.70	12.6	7	10	8	13
1902	39.1	+5.8	79	—1	1.45	—0.32	4.33	0.13	1.3	7	9	11	11
1903	38.8	+5.5	82		1.38	—0.39	3.90	0.15	3.9	7	11	7	13
1904	34.8	+1.5	78		2.18	+0.41	4.57	0.50	4.4	7	8	8	15
1905	41.5	+8.2	84		2.04	+0.27	3.70	0.89	4.1	7	8	8	15
1906	27.1	—6.2	65	—1	2.34	+0.57	4.55	0.58	8.9	10	8	7	16
1907	40.6	+7.3	92	—	1.35	—0.42	5.05	0.23	4.1	6	14	7	10
1908	37.9	+4.6	85	—	1.58	—0.19	3.74	0.45	1.1	6	13	7	11
1909	32.5	—0.8	71	—1	1.53	—0.24	5.00	0.28	9.8	6	12	10	9
1910	48.9	+15.6	92	—1	0.17	—1.60	1.37	0.00	T.	1	23	6	2
1911	39.4	+6.1	83		0.93	—0.84	4.84	T.	1.9	5	16	9	6
1912	24.9	—8.4	70	—19	2.01	+0.24	5.25	0.60	19.1	7	15	6	10
1913	31.9	—1.4	78	—23	2.48	+0.71	5.88	0.74	5.3	9	11	10	10
1914	34.7	+1.4	78	—	1.69	—0.08	3.84	0.28	1.8	7	12	8	11
1915	29.3	—4.0	61	—5	0.96	—0.81	2.12	0.17	8.8	5	8	9	14
1916	35.2	+1.9	80	—18	1.57	—0.20	5.80	0.23	2.9	6	11	9	11
1917	34.6	+1.3	85	—12	1.84	+0.07	4.35	0.57	6.2	6	14	8	9
1918	42.9	+9.6	85	0	0.63	—1.14	2.12	0.03	2.6	3	19	7	5
1919	37.5	+4.2	78	—11	2.33	+0.56	5.40	0.81	1.1	6	15	8	8
1920	38.0	+4.7	80	—21	3.02	+1.25	5.70	0.47	2.4	7	15	7	9
1921	42.8	+9.5	86	4	1.57	—0.20	6.62	0.17	0.2	7	14	8	9
1922	38.3	+5.0	74	— 5	1.97	+0.20	3.73	0.76	3.4	7	12	6	13

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

APRIL

Nearly normal conditions prevailed during April, though both temperature and precipitation showed a slight excess. The temperature excess was general and uniform throughout the State except in the northeastern and south central portions where small areas showed a slight deficiency. The first nine days of the month were warm and in this period most of the excess occurred. During the rest of the month temperature changes were frequent, though not decided, with cool weather predominating. Frosts were general over the greater portion of the State as late as the 29th, but as vegetation had been retarded in growth the last two weeks very little damage resulted from frosts and it was thought that all fruit buds were uninjured at the end of the month, except possibly strawberries sustained slight damage in the south central portion.

The precipitation was below normal over most of the southern division, the extreme northwest and most of the counties bordering the Mississippi River. Most of the precipitation occurred during the first eleven days, when showers occurred almost daily, and as a result very little farm work was accomplished in this period and the seeding of oats was delayed. After the eleventh only two shower periods occurred in connection with the relative strong winds that prevailed the greater portion of the time. the soil dried rapidly and caused a great deal of oats to fail to germinate or resulted in a very poor stand. At the end of the month many fields in the drier western sections that were intended for oats were being prepared for corn.

Many storms occurred throughout the State, especially during the first eleven days. On the evening of the 6th, shortly after 8 p. m. a tornado developed in the eastern portion of Dallas County and its influence was felt in Polk, Boone and Story Counties, but the greatest damage occurred in the northeast corner of Dallas County and the northwest corner of Polk County. The storm originated near Moran and moved in a generally northeasterly direction but the actual path was somewhat zigzag and the tail of the funnel did not reach the earth at all points in its course. Five farms were directly in its path. Two dwellings were partially destroyed, resulting in the death of one woman and the injury of eleven people. The loss to farm buildings was heavy, many being completely destroyed and the contents scattered in all directions. The loss to buildings, stored grain and stock was estimated at $200,000. On the same afternoon severe hail storms occurred at many places in the western portion of the State, the damage being particularly heavy to greenhouses in Council Bluffs and it was estimated that the damage to glass and hothouse plants amounted to $100,000. On the 11th there appeared to be several tornadoes in the southwestern portion of the State that were accompanied by severe hail, the greatest damage being confined to Adams, Taylor and Ringgold Counties. Many buildings were destroyed and many fruit trees and telephone poles broken down. No human lives were lost but the loss to stock was heavy. Horses were killed by buildings collapsing, and hogs and chickens were killed by hail stones which were as large as hen's eggs, and a stone in the shape of a disk was reported seven inches long and three inches wide. The northwestern portion of the State was visited by a heavy, wet snow on the 11th, that broke down trees and completely wrecked telephone and telegraph lines.

Pressure. The mean pressure (reduced to sea level) for the State was 30.00 inches. The highest recorded was 30.58 inches, at Davenport, on the 28th, and the lowest was 28.92 inches, at Des Moines, on the 8th. The monthly range was 1.66 inches.

Temperature. The mean temperature for the State, as shown by the records of 98 stations, was 49.9°, or 1.2° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows Northern, 47.5°, or 0.8° higher than the normal; Central, 50.4°, or 1.5° higher than the normal; Southern, 51.8°, or 1 2° higher than the normal. The highest monthly mean was 53.8° at Keokuk, and the lowest was 45.2° at Northwood. The highest temperature reported was 87° at Thurman, on the 6th, and the lowest was 21° at Boone, on the 1st. The temperature range for the State was 65°.

Humidity. The average relative humidity for the State at 7 a. m. was 79 per cent, and at 7 p. m. it was 59 per cent. The mean for the month was 69 per cent, which is 3 per cent more than the normal. The highest monthly mean was 76 per cent at Charles City, and the lowest was 64 per cent at Sioux City.

Precipitation. The average precipitation for the State, as shown by the records of 100 stations, was 3.06 inches, or 0.20 inch more than the normal. By divisions the averages were as follows: Northern, 3.25 inches, or 0.57 inch more than the normal; Central, 3.30 inches, or 0.44 inch more than the normal; Southern, 2.63 inches, or 0.42 inch less than the normal. The greatest amount, 6.70 inches occurred at Algona, the least 1.04 inches, occurred at Inwood. The greatest amount in any 24 consecutive hours, 3.72 inches, occurred at Algona, on the 11th.

Snow. The average snowfall for the State was 1.0 inch, or 0.8 inch less than the normal. Practically all the snow occurred in the northwest portion of the State on the 11th, and only a few stations in the central and southern division reported more than a trace. The greatest fall reported was 10.0 inches at Spencer.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 53, or 7 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 48; Davenport, 45; Des Moines, 52; Dubuque, 48; Keokuk, 55; Sioux City, 53; Omaha, Neb., 67.

Miscellaneous Phenomena. Aurora: 21st, 22d. Fog: 3d, 4th, 5th, 6th, 7th, 8th, 10th, 24th, 25th. Hail: 6th, 7th, 8th, 9th, 10th, 11th, 12th, 14th, 16th, 17th. Halos (lunar and solar): 1st, 3d, 13th, 14th, 21st, 23d, 26th, 27th, 28th. Sleet: 10th, 11th, 13th, 17th. Thunderstorms: 3d, 6th, 7th, 8th, 10th, 11th, 12th, 16th, 17th, 18th, 24th. Tornado: 6th, 11th.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported from a regular Weather Bureau Station was at the rate of 55 miles per hour, from the northwest, at Sioux City, on the 19th.

Rivers. High stages prevailed on all rivers the greater part of the month, but the flood stage was not reached except on the Mississippi River, where one of the worst floods in the history of the State occurred. The flood was caused principally from the discharge of streams in Wisconsin and Minnesota.

COMPARATIVE DATA FOR THE STATE—APRIL.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 In. or more	Clear	Partly cloudy	Cloudy
1890	51.8	+ 3.1	88	2	1.80	—1.06	4.46	0.38	------	6	14	9	7
1891	50.6	+ 1.9	93	13	2.15	—0.71	5.06	0.59	------	8	14	7	9
1892	45.4	— 3.3	88	14	4.75	+1.89	8.38	2.43	5.7	9	8	9	13
1893	45.5	— 3.2	96	15	4.21	+1.35	8.51	1.24	6.0	10	8	9	13
1894	51.7	+ 3.0	93	12	3.07	+0.21	6.91	0.55	0.2	9	11	11	8
1895	54.2	+ 5.5	98	8	2.62	—0.24	5.88	0.28	2.1	5	14	8	8
1896	54.5	+ 5.8	94	10	5.02	+2.16	9.67	2.35	4.5	11	11	10	9
1897	47.9	— 0.8	89	19	5.35	+2.49	9.86	2.22	T.	11	9	9	12
1898	48.1	— 0.6	91	14	2.56	—0.30	4.82	0.27	T.	8	13	9	8
1899	48.9	+ 0.2	89	1	2.40	—0.46	5.76	0.56	2.0	7	12	11	7
1900	52.2	+ 3.5	89	19	2.67	—0.19	6.62	0.43	0.9	6	12	9	9
1901	49.9	+ 1.2	92	15	1.79	—1.07	3.47	0.66	2.0	5	14	8	8
1902	48.2	— 0.5	96	9	1.71	—1.15	4.15	0.40	T.	5	14	11	5
1903	49.8	+ 1.1	86	17	2.98	+0.12	6.00	0.74	0.8	9	11	9	10
1904	44.1	— 4.6	86	13	3.63	+0.77	8.97	1.52	1.4	7	15	6	9
1905	47.5	— 1.2	90	10	3.03	+0.17	5.49	0.63	1.2	8	12	8	10
1906	52.5	+ 3.8	94	22	2.42	—0.44	5.55	0.53	0.6	8	14	9	7
1907	41.5	— 7.2	80	10	1.32	—1.54	3.22	0.24	2.7	6	12	8	10
1908	50.5	+ 1.8	91	8	2.24	—0.62	4.59	0.67	0.3	8	14	8	8
1909	43.8	— 4.9	86	14	4.58	+1.72	9.43	0.83	3.1	12	9	9	12
1910	52.5	+ 3.8	99	15	1.48	—1.38	4.86	0.10	3.0	7	14	7	9
1911	46.7	— 2.0	86	3	3.09	+0.23	6.04	1.33	3.6	9	11	8	11
1912	49.9	+ 1.2	84	20	2.66	—0.20	5.66	0.78	1.1	8	13	8	9
1913	50.2	+ 1.5	88	16	3.28	+0.42	7.43	1.12	2.7	9	15	5	10
1914	48.6	— 0.1	88	11	2.52	—0.34	5.03	0.37	0.3	8	10	8	12
1915	57.2	+ 8.5	95	18	1.41	—1.45	4.02	0.05	T.	7	15	10	5
1916	47.1	— 1.6	90	11	2.62	—0.24	5.92	1.13	1.1	10	10	9	11
1917	45.5	— 3.2	88	17	4.55	+1.69	7.84	2.05	3.8	11	9	7	14
1918	44.8	— 3.9	79	12	2.32	—0.54	4.20	1.01	3.5	9	12	8	10
1919	48.4	— 0.3	81	20	4.78	+1.92	9.00	1.94	0.7	14	8	8	14
1920	42.4	— 6.3	78	22	4.59	+1.73	7.13	1.93	2.0	12	8	9	13
1921	52.4	+ 3.7	88	14	3.34	+0.48	6.69	0.99	3.6	10	13	7	10
1922	**49.9**	**+ 1.2**	**87**	**21**	**3.06**	**+0.20**	**6.70**	**1.04**	**1.0**	**9**	**11**	**9**	**10**

T. indicates an amount too small to measure, or less than .005 inch rainfall and less than .05 inch snowfall.

REPORT ON MISSISSIPPI RIVER FLOOD OF APRIL, 1922, DUBUQUE DISTRICT.

By Thomas A. Blair, Meteorologist.

Weather Bureau Office, Dubuque, Iowa, May 11, 1922.

Warm weather during the latter half of March over the drainage area of the Mississippi River above Dubuque, particularly in Minnesota and Wisconsin, had resulted in considerable run-off, raising the Mississippi and its tributaries above Dubuque to rather high levels. There followed during the first ten days of April frequent and moderately heavy rains, attended by unusually warm weather. Although the snow cover was thought to be less than the average, the result was a flood beginning at La Crosse on April 12, and reaching its maximum stage at Dubuque on the 21st, of a magnitude which has been equaled but three times in the past 50 years.

In the maximum stages reached this flood was very nearly the counterpart of that of March and April, 1920, but in the manner of rise there was considerable difference. In 1920 a rather rapid rise began immediately after the breaking up of the ice, becoming very rapid as the crest of the flood was approached. In 1922 the river opened about the middle of March and from that time to the end of March moderately high stages, sufficient to overflow the lower islands and bottoms, were maintained with little change. Then began a continuous and approximately uniform rise until about five days before the peak was reached, then the rate increased considerably but did not attain the rate reached in 1920. In the latter half of its rise it resembled very closely the floods of 1880 and 1888, but these latter were more rapid in the early stages.

Maximum stages reached from La Crosse to Dubuque in the six floods of the past 50 years are shown in the accompanying table:

	Flood Stage	1880	1881	1888	1916	1920	1922
La Crosse	12	16.0	13.2	14.5	13.6	14.2	13.7
Lansing	18	--------	--------	--------	16.4	17.3	17.3
Prairie du Chien	18	21.5	19.0	20.0	18.3	19.6	19.4
Dubuque	18	21.7	20.2	21.4	19.8	21.0	21.0

It is evident that a large part of the flood waters came from above La Crosse, for the maximum stage there was 1.7 feet above flood stage, and the highest at Lansing was the same as that of two years ago, but a flood exceeding that of 1920 was in progress on the Wisconsin River at the same time and added considerably to the stages reached at Prairie du Chien and Dubuque. The peak of the Wisconsin flood wave reached Prairie du Chien, however about three days earlier than that from the Mississippi and hence the crests occurred at Prairie du Chien and Dubuque a little earlier and were a little lower than would have been the case if the Wisconsin flood had been a few days later.

From below La Crosse to below Lansing the damage was comparatively slight, as is usually the case with spring floods. The largest item aside from the injury to and the cost of protection of railroad roadbeds was the collapse of a warehouse filled with ice at Lansing. At Prairie du Chien about one-fourth of the town was under water, and the people were traveling on the streets by boat. As a result of the warnings, all live stock and much movable property were moved to higher portions of the city, while many families either moved from their residences altogether or moved to the second floors. Railroad traffic east into the Wisconsin Valley and north into the Kickapoo Valley was suspended. Opposite Prairie du Chien, at Marquette and McGregor, Iowa, buildings along the river front were inundated, causing interruption of business. Much land was overflowed in the vicinity of Cassville, Wis., and Waupeton, Iowa, causing a loss estimated at about $50,000.

At Dubuque the overflow was a duplicate of that of 1920. Many plants and establishments along the river front and on the lower ground back from the river were surrounded or partially surrounded by water, and several were forced to suspend operations. Practically all of the factories and wholesale houses in the southern end of the town suffered flooded basements. Considerable lengths of track of the Illinois Central, the Chicago, Burlington & Quincy, and the Chicago, Milwaukee & St. Paul railroads were under water, and traffic was diverted and partially suspended. Much labor and material were used in protecting tracks and embankments from undermining. A high northwest wind on the 19th, when the river was within five inches of its maximum stage, added to the difficulties of the railroads and others in preventing the wearing away of dikes.

Many families living in the lowlands on both sides of the river were temporarily driven from their homes, and a much larger number had flooded basements. At least 14 cottages, situated on the islands in the vicinity of Dubuque and used as summer residences, were carried away by the flood waters in conjunction with the high wind on the 19th.

On April 12th, nine days before the crest of the flood reached Dubuque, flood warnings were issued for the entire district from below La Crosse to Dubuque. On April 17th definite forecasts of maximum stages were made, as follows: Lansing, 17.0 feet; Prairie du Chien, 19.5 feet; Dubuque, 21.0 feet. Warnings were distributed by mail to all towns in the district, an those having property subject to overflow in general did whatever could be done to remove or protect it, so that the preventable loss was slight.

Statistics of Money Loss by Flood in the Mississippi River, Dubuque River District, April, 1922.

Losses to tangible property that can only be restored by the outlay of cash, includes loss to buildings, factories, municipal plants, highways and bridges	$68,000
Losses to railroads, principally expenditures in protecting and restoring tracks and roadbeds	35,000
Loss of crops	10,000
Loss of prospective crops	3,500
Loss of live stock or other movable property	4,000
Loss due to suspension of business	20,000
Total losses reported	$140,500
Money value of property saved by warnings, as reported	154,000

MISSISSIPPI RIVER FLOOD

From below Dubuque to Muscatine, April, 1922.

By Andrew M. Hamick, Meteorologist.

Weather Bureau Office, Davenport, Iowa, May, 20, 1922.

During the first 21 days of April, 1922, rain fell on some part of the watershed of the Mississippi River from Muscatine northward on every day but three. The frequent rains, while not very heavy, except on the 10th and 16th, fell on a well-saturated soil and the run-off was above normal.

As an index of the general situation, note the conditions at Davenport: The precipitation during the month of March was 3.40 inches, 1.19 inches above normal. There were 21 cloudly days during the month, and consequently little evaporation. The percentage of possible sunshine was 42, 16 per cent below the normal for March.

The rivers were rising steadily in the vicinity of Prairie du Chien and Dubuque by the end of March, and the continued rainy weather during the first ten days of April made it apparent that a flood would be experienced in the Davenport District during the last decade of the month. Forecasts were issued daily for a steady rise, and on April 14 interests were advised that the crest stage would reach Davenport during the week of April 23-29. On April 17 a general flood warning was issued to the effect that the crest stages would equal those of the 1920 flood in this District. On Wednesday, April 19, the following definite stages were forecast: Clinton, 19.0 feet by Saturday; Le Claire, 13.0 feet by Saturday; Davenport, 17.0 feet by Saturday, and Muscatine, 19.0 feet by Saturday night. Those stages were reached within one-tenth of a foot at all stations.

At Davenport, the crest stage was 17.1 feet on April 23, exactly the same as the crest in the flood of 1920; at Clinton, the crest stage was 19.0 feet, during the night of April 21-22, exactly the same as the crest in 1920; at Le Claire the crest was 12.9 feet during the night of April 22-23. 0.5 foot less than the crest in 1920, but the difference was due to the gage readings being affected by a dam which has been built near Le Claire since 1920, as the overflowed area was practically the same; at Muscatine, the water rose above the permanent river gage, and a temporary gage showed a stage of 19.1 feet on the morning of the 23d, and reached the crest stage of 19.5 feet on the 24th, the highest of record. Levees in the vicinity of Muscatine have been strengthened considerably since the flood of 1920, and, therefore, a much higher gage reading resulted; the highest stage reached in 1920 was 18.0 feet, but the levees gave way and prevented what would have been at least another foot rise. On April 26, the levee broke at a point ten miles north of Burlington, and that relieved the situation at Muscatine, even though the crest had already been reached at the latter place.

Forecasts and warnings were given wide distribution by mail, newspapers, telephone, and radio, and all interests had ample time to protect their property. No losses were sustained as a result of being unprepared to meet the emergency. In the vicinity of Muscatine and New Boston hundreds of men worked day and night, patrolling and strengthening the levees; high northwest winds on April 19 made conditions critical for the Illinois side of the river, but fortunately the levees held, and favorable weather prevailed during the remainder of the week.

A careful survey of the Tri-Cities and their environs is summed up as follows.

Loss and damage due to flooding of property which could not be protected	$37,000
Added expenses, incurred in protection work	9,000
Losses due to suspension of business	1,000

Muscatine reports items similar to above and crop loss totaling $31,000, also that $400,000 worth of property was saved by the warnings.

No loss of life by drowning occurred in this District as a direct result of the flood.

MAY

May, 1922, was characterized by remarkably uniform temperatures, the range between the northern and southern divisions amounting to only 2.4° and the range for the State was the least ever recorded since State wide records began in 1890. For the second time in 33 years the minimum temperature did not reach the freezing point, the lowest temperature recorded being 34°, which is the highest May minimum of record, and only a few light frosts occurred on the 13th which did no damage. The mean temperature averaged nearly three degrees above the normal and most of the excess occurred during the first twelve days. During the rest of the month the temperature was near normal though mostly slightly below normal and the last two days rather cool.

The precipitation averaged more than an inch below normal and was very unevenly distributed. The greatest deficiency occurred in the northern division. The central and southern division averaged near normal due to decided excess over the central and south-central sections. Over much of the western and north-central portions of the State, a drouth set in during April that was not relieved during the entire month of May and at the end of the month the drouth was serious over a large area. Up until the 23d only light showers occurred at frequent intervals, but on the 23d a general shower period set in that continued for five days over a large portion of the State and excessive amounts were recorded at many points in the central, south-central and southeastern portions of the State. Over this area farm work was temporarily stopped or greatly retarded and many corn fields became weedy and large patches were covered with water. At most stations reporting reavy amounts the rate of fall was moderate and most of the water was absorbed by the soil without causing serious flood damage, but at Burlington the rain fell at a remarkably rapid rate on the afternoon of the 26th, and a serious flood occurred. Rain began falling at 2:30 p. m. and increased rapidly and at 3:15 p. m. the total fall for 45 minutes from the time of beginning was 2.35 inches, which is one of the heaviest falls ever experienced in the State. The sewers were not adequate to carry the water from the streets and at points in the city the water was over four feet deep. Great damage was done to all kinds of property but power plants, railroads and business houses with goods stored in basements were the heaviest losers. The damage to property and goods in Burlington was estimated at $200,000, and the loss to crops, and buildings and railroads in the vicinity was probably as great.

Hail storms were frequent and covered much of the State and in localities were severe. On the evening of the 6th a storm occurred at Boone and vicinity that did considerable damage to greenhouses and crops and on the late afternoon a severe storm occurred in the vicinity of Iowa City that damaged fruit greatly, broke many window glasses and killed chickens. This storm assumed tornadic characteristics particularly near Tiffin, Johnson County, and did considerable damage to fruit trees and small farm buildings. On the afternoon of the 11th a tornado occurred about one mile southeast of Plainfield, Bremer County, which caused damage to a number of homes and destroyed a large number of farm buildings. One man was severly injured; horses, cattle, hogs and chickens were killed and fruit trees suffered considerable damage as a result of this storm. The path .of the storm where the greatest damage occurred was about two miles wide and four miles long.

Pressure. The mean pressure (reduced to sea level) for the State was 29.92 inches. The highest recorded was 30.38 inches at Duqubue, on the 28th, and the lowest was 29.41 inches at Davenport, on the 18th. The monthly range was 0.97 inch.

Temperature. The mean temperature for the State, as shown by the records of 98 stations was 63.4° or 2.9° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 61.9°, or 2.9° higher than the normal; Central, 64.0°, or 3.3° higher than the normal; Southern, 64.3°, or 2.6° higher than the normal. The highest monthly mean was 67.8°, at Fairport, and the lowest was 60.4°, at Estherville. The highest temperature reported was 91° at Cedar Rapids, on the 10th, and the lowest was 34° at Pocahontas on the 13th and Washta, on the 7th and 13th. The temperature range for the State was 57°.

Humidity. The average relative humidity for the State at 7 a. m. was 77 per cent, and at 7 p. m. it was 58 per cent. The mean for the month was 68 per cent, which is just normal. The highest monthly mean was 72 per cent, at Charles City, and the lowest was 62 per cent, at Sioux City.

Precipitation. The average precipitation for the State, as shown by the records of 100 stations, was 3.53 inches, or 1.04 inches less than the normal. By divisions the averages were as follows: Northern, 2.47 inches, or 2.01 inches less than the normal; Central, 3.92 inches, or 0.67 inch less than the normal; Southern, 4.21 inches, or 0.43 inch less than the normal. The greatest amount, 8.36 inches, occurred at Ames, and the least, 0.47 inch, occurred at Algona. The greatest amount in 24 consecutive hours, 3.90 inches, occurred at Lacona, on the 24th

Wind. The prevailing direction was from the south. The average velocity was 8.0 miles per hour, or 0.7 mile less than the normal. The highest velocity reported from a regular Weather Bureau Station was at the rate of 48 miles an hour, from the southwest, at Sioux City, on the 11th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 59, or 3 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 56; Davenport, 55; Des Moines, 56; Dubuque, 52; Keokuk, 65; Sioux City, 54; Omaha, Nebr., 72.

Miscellaneous Phenomena. Aurora: 20th. Fog: 3d, 13th, 16th, 17th, 24th, 30th. Frost: (light) 13th. Hail: 2d, 3d, 5th, 6th, 8th, 11th, 12th, 13th, 14th, 15th, 16th, 20th, 24th, 25th, 26th, 28th, 30th. Halos: 1st, 2d, 3d, 4th, 7th, 8th, 13th, 14th, 15th, 27th. Rainbows: 5th, 15th, 16th, 17th, 26th. Thunderstorms: All dates except 1st, 7th, 19th, 20th, 21st, 28th, 29th, 31st. Tornadoes: 8th, 11th.

Rivers. Gradually falling stages prevailed on the Mississippi River except south of Clinton, where a slight rise occurred after the rains that set in on the 23d. Moderate stages prevailed on the Missouri River with very little fluctuation except about the middle of the month when a moderate rise occurred. Low stages prevailed on most interior rivers but a sharp rise accurred on the Skunk, Des Moines and Raccoon Rivers after the heavy rains the last week of the month.

COMPARATIVE DATA FOR THE STATE—MAY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	57.7	—2.8	90	26	3.56	—1.01	6.44	1.61	------	9	10	13	8
1891	58.3	—2.2	94	21	3.18	—1.39	7.10	1.46	------	8	14	9	8
1892	54.0	—6.5	88	29	8.77	+4.20	12.64	4.87	T.	16	5	9	17
1893	56.6	—3.9	96	26	3.45	—1.12	5.82	1.65	0	9	13	9	9
1894	61.1	+0.6	96	22	1.87	—2.70	4.77	0.33	0	6	17	10	4
1895	61.7	+1.2	104	24	3.19	—1.38	5.79	0.84	0	9	11	12	8
1896	65.5	+5.0	100	34	6.69	+2.12	11.79	3.40	0	12	11	12	8
1897	58.5	—2.0	96	20	1.92	—2.65	3.59	0.21	0	5	16	10	5
1898	59.6	—0.9	92	26	4.67	+0.10	7.82	2.22	0	12	9	10	12
1899	60.2	—0.3	90	27	6.23	+1.66	11.47	3.09	0	13	9	12	10
1900	63.2	+2.7	98	22	3.31	—1.26	6.98	0.96	0	8	14	10	7
1901	60.7	+0.2	95	28	2.35	—2.22	4.57	0.72	0	7	16	9	6
1902	63.8	+3.3	97	25	5.39	+0.82	18.04	0.87	0	13	10	12	9
1903	61.6	+1.1	91	24	8.55	+3.98	15.45	2.88	0	16	9	12	10
1904	59.6	—0.9	93	27	3.78	—0.79	8.15	1.50	0	8	13	10	8
1905	58.3	—2.2	88	28	5.95	+1.38	10.83	2.57	0	14	12	11	8
1906	60.8	+0.3	95	24	3.54	—1.03	10.72	0.89	0	11	13	10	8
1907	53.5	—7.0	96	14	3.48	—1.09	7.68	0.71	1.0	10	11	10	10
1908	59.4	—1.1	93	13	8.34	+3.77	14.33	1.33	0	15	9	11	11
1909	57.9	—2.6	97	18	4.34	—0.23	7.85	1.86	0.1	9	12	12	7
1910	55.4	—5.1	89	18	3.41	—1.16	6.91	1.29	T.	10	15	7	9
1911	64.9	+4.4	98	23	3.76	—0.81	8.73	0.42	0.7	9	16	9	6
1912	62.7	+2.2	97	29	3.33	—1.24	6.41	0.72	0	10	14	11	6
1913	59.4	—1.1	102	30	6.24	+1.67	10.25	3.14	0	13	11	8	12
1914	62.2	+1.7	98	25	3.31	—1.26	6.90	0.30	T.	10	14	11	6
1915	56.1	—4.4	99	25	7.34	+2.77	13.21	3.82	T.	14	9	9	13
1916	59.9	—0.6	94	27	4.93	+0.36	10.44	2.14	T.	12	13	10	8
1017	55.1	—5.4	95	18	3.87	—0.70	7.33	1.69	0.6	10	15	8	8
1918	64.9	+4.4	98	25	6.87	+2.30	11.98	2.72	T.	13	13	11	7
1919	58.2	—2.3	93	30	3.11	—1.46	7.14	0.73	0	9	13	11	7
1920	59.4	—1.1	89	29	3.26	—1.31	5.73	0.62	0	8	14	9	8
1921	63.3	+2.8	99	25	4.23	—0.34	9.41	1.32	0	10	14	10	7
1922	63.4	+2.9	91	34	3.53	—1.04	8.36	0.47	0	12	13	10	8

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

JUNE

June was considerably warmer than normal and unusually dry. The month opened cool and the first three days were the coldest of the month. After the third the temperature was continuously above normal except a single day near the middle of the month and a short period during the last week when temperatures were slightly below normal. The warmest day occurred over practically the entire State on the 23d and temperatures of 100°, or higher, were reported from a number of stations in the northwest portion.

The outstanding feature of the month's weather was a severe drouth that covered practically the entire State. The rainfall average for the State was the same as in 1911, which previous to this June was the driest of record. Light showers occurred at frequent intervals, but they were not sufficient to maintain the normal growth of staple crops. Corn had not advanced to a stage where it could be permanently injured, but the hot weather started the leaves to curl in many fields in the drier sections. Oats suffered most. Much of the crop in the west-central and northwest counties headed too short to be harvested and was grazed off. Barley and spring wheat also were injured. Pastures, hay, truck crops and gardens also suffered greatly on account of the dry weather. Winter wheat, alfalfa and rye were not materially injured. High winds were frequent and considerable damage resulted from this source to standing grain, farm buildings, windmills and trees, but they were all straight blows and no tornadoes are known to have occurred.

Hailstorms occurred at many places on many dates, but the damage was much less than usual on account of the storms being confined to smaller areas than ordinary. A rather severe storm in Union Township, Kossuth County, on the 5th did considerable damage to crops and killed several hundred chickens, a number of hogs and cattle and two horses. Another hailstorm, of more than ordinary severity, in Cerro Gordo County on the 12th caused much damage to crops and broke the glass in greenhouses. In both storms stones of unusual dimensions were reported and heaps of stones remained unmelted for ten hours.

The month was unusually favorable for all outside work. Building operations were carried on with practically no interruption and at the end of the month most of the corn crop had been laid by. The general rain the last of the month greatly relieved the drouth, but it came too late to save many gardens, truck crops and berries. Roads were unusually good during the entire month.

Temperature. The mean temperature for the State, as shown by the records of 95 stations, was 72.2°, or 3.1° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 70.9°, or 3.3° higher than the normal; Central, 72.6°, or 3.3° higher than the normal; Southern, 73.1°, or 2.8° higher than the normal. The highest monthly mean was 75.2°, at Glenwood and Thurman, and the lowest was 67.3°, at Postville. The highest temperature reported was 104°, at Inwood, on the 23d, and the lowest was 38°, at Decorah on the 1st and Washta on the 3d. The temperature range for the State was 66°.

Pressure. The mean pressure (reduced to sea level) for the State was 29.96 inches. The highest recorded was 30.37 inches, at Sioux City, on the 25th, and the lowest was 29.53 inches, at Sioux City, on the 10th. The monthly range was 0.84 inch.

Humidity. The average relative humidity for the State at 7 a. m. was 74 per cent, and at 7 p. m. was 51 per cent. The mean for the month was 62 per cent, or 8 per cent below the normal. The highest monthly mean was 67 per cent, at Dubuque, and the lowest was 58 per cent at Sioux City.

Precipitation. The average precipitation for the State, as shown by the records of 99 stations, was 1.82 inches, or 2.56 inches less than the normal. By divisions, the averages were as follows: Northern, 1.67 inches, or 2.76 inches less than the normal; Central, 1.34 inches, or 2.98 inches less than the normal; Southern, 2.46 inches, or 1.93 inches less than the normal. The greatest amount, 7.19 inches, occurred at Corning, and the least, 0.28 inch, at Iowa City. The greatest amount in 24 consecutive hours, 3.20 inches, occurred at Corning on the 30th.

Wind. The prevailing direction of the wind was from the southwest. The highest velocity reported from a regular Weather Bureau station was 67 miles an hour, from the south, at Sioux City on the 8th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 75, or 6 per cent above the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 74; Davenport, 82; Des Moines, 74; Dubuque, 70; Keokuk, 81; Sioux City, 61; Omaha, Nebr., 81.

Miscellaneous Phenomena. Fog: 2d, 3d. Hail: 4th, 5th, 9th, 10th, 12th, 13th, 15th, 18th, 25th, 26th. Halos (lunar and solar): 1st, 4th, 10th, 14th, 16th, 24th. Strong Winds: 4th, 5th, 6th, 8th, 12th, 13th, 15th, 18th, 22d, 23d, 24th. Thunderstorms: all days during the month except on the 1st, 2d, 3d, 4th, 7th, 17th, 21st, 23d, 29th.

Rivers. Low, gradually falling stages prevailed on the Mississippi River till the middle of the month, after which nearly stationary stages prevailed. Low and nearly stationary stages prevailed on all interior rivers. A moderate rise occurred on the Missouri River at the beginning of the month and a general rising tendency prevailed most of the time.

COMPARATIVE DATA FOR THE STATE—JUNE.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890---------	72.7	+3.6	106	44	7.76	+3.38	16.53	1.57	-----	11	12	10	8
1891---------	69.1	0.0	99	37	5.39	+1.01	19.88	1.68	-----	11	8	10	12
1892---------	69.2	+0.1	102	42	5.19	+0.81	14.16	0.67	-----	10	12	11	7
1893---------	71.2	+2.1	100	40	3.91	—0.47	7.56	1.36	-----	8	15	11	4
1894---------	73.2	+4.1	104	34	2.67	—1.71	6.20	0.57	-----	7	16	10	4
1895---------	69.7	+0.6	102	34	4.32	—0.06	9.26	0.98	-----	10	11	11	8
1896---------	69.1	0.0	100	40	3.11	—1.27	7.89	0.81	-----	9	12	13	5
1897---------	69.1	0.0	103	29	3.81	—0.57	9.38	1.03	-----	10	10	12	8
1898---------	71.4	+2.3	99	42	4.72	+0.34	12.48	1.90	-----	9	13	10	7
1899---------	70.7	+1.6	100	42	5.04	+0.66	11.99	1.10	-----	10	12	13	5
1900---------	69.7	+0.6	102	38	3.98	—0.40	12.35	0.67	------	5	17	10	3
1901---------	72.3	+3.2	106	30	3.71	—0.67	7.84	1.05	------	9	15	11	4
1902---------	65.2	—3.9	97	32	7.16	+2.78	16.04	1.46	------	14	8	11	11
1903---------	64.6	—4.5	96	30	2.86	—1.52	6.04	0.75	------	10	13	10	7
1904---------	67.1	—2.0	94	35	3.45	—0.93	8.35	0.44	------	7	13	10	7
1905---------	69.9	+0.8	100	36	5.53	+1.15	14.89	1.80	------	10	12	11	7
1906---------	67.9	—1.2	99	37	3.92	—0.46	8.27	1.48	------	8	15	10	5
1907---------	66.5	—2.6	98	36	5.35	+0.97	9.33	2.07	------	11	14	9	7
1908---------	67.1	—2.0	94	35	5.66	+1.28	11.88	1.77	------	13	12	10	8
1909---------	69.1	0.0	96	40	6.41	+2.03	13.30	2.80	------	13	12	10	8
1910---------	69.5	+0.4	105	33	1.99	—2.39	5.51	0.05	------	7	18	7	5
1911---------	75.7	+6.6	108	36	1.82	—2.56	6.28	0.06	------	5	20	8	2
1912---------	66.2	—2.9	101	34	2.74	—1.64	5.71	0.78	------	7	15	9	6
1913---------	71.5	+2.4	102	33	3.31	—1.07	8.95	0.74	------	7	19	8	3
1914---------	72.2	+3.1	101	40	5.57	+1.19	13.24	1.17	------	13	12	14	4
1915---------	65.1	—4.0	91	31	4.16	—0.22	9.99	1.72	------	11	12	12	6
1916---------	64.5	—4.6	96	38	3.71	—0.67	7.96	1.41	------	10	13	11	6
1917---------	66.0	—3.1	100	32	6.65	+2.27	13.82	3.04	------	12	13	10	7
1918---------	70.8	+1.7	104	38	5.29	+0.91	10.19	1.55	------	11	16	10	4
1919---------	71.9	+2.8	98	41	6.13	+1.75	12.25	1.82	------	13	12	12	6
1920---------	70.7	+1.6	99	40	3.56	—0.82	8.48	1.25	------	9	16	10	4
1921---------	74.7	+5.6	100	40	3.76	—0.62	8.85	0.56	------	9	16	10	4
1922---------	72.2	+3.1	104	38	1.82	—2.56	7.19	0.28	------	6	19	8	3

T. indicates an amount too small to measure, or less than .005 inch rainfall and less than .05 inch snowfall.

JULY

July was cool and wet. Since State-wide records began in 1890 there have been but five times that the mean temperature for July has been lower and only four times has there been more rainfall. The month was characterized by remarkably uniform temperature, the entire absence of hot periods and an unusual number of damaging wind, hail and thunderstorms.

The mean temperature for the month was 2.6° below normal and the deficiency was uniform over all divisions. This is the first month of the year that the mean temperature has been below normal and the second since August, 1920. Over most of the northern division, about half of the central and a large portion of the southern division the maximum temperature was below 90° and only once since 1890 has the maximum for the State been lower.

There was a decided excess in precipitation and all stations, except a few in the northern division, reported more than the normal. The first general rainstorm set in on the 5th, and the drouth that had prevailed over portions of the State since May was effectually broken, except in a few small areas, and thereafter rather general thunderstorms occurred at frequent intervals and at the end of the month there was sufficient moisture over the entire State. Nearly all the rains were attended by severe hail, strong winds and destructive lightning and the damage from these sources was unusually heavy. The first hailstorm of a damaging character occurred on the evening of the 5th, starting near the junction of Calhoun, Green and Webster Counties and moving southeastward across Boone County to the southern portion of Story County and the northern portion of Polk County. Many thousand acres of corn were severely damaged and areas covering whole sections were entirely ruined. One township in Story County reported damage ranging from 10 to 85 per cent to 20,000 acres and the entire loss in this storm from wind and hail probably exceeded $1,000,000. Another severe hail and windstorm occurred in Bremer and Blackhawk Counties on the 15th that damaged corn and other crops over a large area. On the late afternoon of the 16th a severe hail, wind and electric storm developed in the northern portion of Green County and moved southeastward to Jasper County. At Paton, Boone, Colfax and Newton tornadic characteristics developed and many buildings were wrecked fruit and shade trees uprooted and cornfields leveled, but the greatest damage came from hail, which entirely destroyed many fields. Floyd and Bremer Counties were visited by a severe wind and hailstorm on the night of the 29th-30th that did much damage to crops and small buildings. The storm apparently originated in Minnesota and moved across Mitchell County into Floyd and Bremer Counties and increased in severity and disappeared in Chickasaw County. Tornadic characteristics were evident at Colwell, Floyd County, but the principal damage was caused by hail and straight winds. A large number of scattered hail and windstorm occurred over the State that did considerable damage. A detailed account will appear in the August report.

The losses caused by the destructive storms were more than offset by the benefit derived from the copious rainfall and the corn crop generally became excellent in condition, other growing crops greatly revived and pastures and meadows were almost as green as in early spring. The soil was in good condition for plowing and many acres were prepared for winter wheat. Small grain, both in shock and standing, were damaged greatly by the continued wet weather and wind. The apple crop is unusually heavy and many trees are breaking down under the great load of fruit.

Pressure. The mean pressure (reduced to sea level) for the State was 30.00 inches. The highest pressure recorded was 30.35 inches, at Dubuque, on the 13th, and the lowest was 29.46 inches, at Sioux City, on the 9th. The monthly range was 0.54 inch.

Temperature. The mean temperature for the State, as shown by the records of 98 stations, was 71.5°, or 2.6° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 69.8°, or 2.9° lower than the normal; Central, 71.7°, or 2.6° lower than the normal; Southern, 73.0°, or 2.2° lower than the normal. The highest monthly mean was 75.5°, at Keokuk, and the lowest was 67.2°, at Postville. The highest temperature recorded was 98°, at Burlington, on the 9th, and the lowest was 40°, at Estherville, on the 7th. The temperature range for the State was 58°.

Humidity. The average relative humidity for the State at 7 a. m. was 79 per cent, and at 7 p. m. it was 57 per cent. The mean for the State was 68 per cent, which is the normal. The highest monthly mean was 72 per cent, at Charles City, and the lowest was 62 per cent at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 100 stations, was 6.31 inches, or 2.35 inches more than the normal. By divisions the means were as follows: Northern, 5.23 inches, or 1.35 inches more than the normal; Central, 6.59 inches, or 2.61 inches more than the normal; Southern, 7.11 inches, or 3.09 inches more than the normal. The greatest amount, 11.72 inches, occurred at Mt. Ayr, and the least, 3.13 inches, at Northwood. The greatest amount in 24 consecutive hours was 4.32 at Fayette, on the 6th and 7th.

Wind. The prevailing direction of the wind was from the south. The highest velocity reported from a regular Weather Bureau station was 48 miles per hour, from the northeast, at Sioux City, on the 8th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 64, or 10 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 65; Davenport, 65; Des Moines, 56; Dubuque, 60; Keokuk, 75; Sioux City, 53; Omaha, Nebr., 74.

Miscellaneous Phenomena. Fog: 11th, 30th. Hail: 5th, 6th, 8th, 9th, 15th, 16th, 25th, 26th, 28th, 30th. Halos (Lunar and Solar): 6th, 11th, 20th, 21st, 28th. Rainbow: 15th, 31st. Thunderstorms: all dates during the month except 3d, 4th, 13th, 18th. Tornado: 16th, 29th.

Rivers. Moderate stages prevailed on the principal rivers with very little change except following the heavy rainstorms. Stages were generally low in the interior rivers, though rather high in the lower reaches of the Des Moines and Skunk Rivers following the heaviest rains. Most of the rains were absorbed by the soil and the run-off was gradual.

COMPARATIVE DATA FOR THE STATE—JULY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	75.6	+1.5	110	45	1.98	—1.98	5.00	0.37	------	3	18	8	5
1891	68.5	—5.6	99	41	4.22	+0.26	8.20	1.67	------	8	13	13	5
1892	73.0	—1.1	104	38	5.29	+1.33	12.86	1.71	------	9	16	10	5
1893	75.0	+0.9	102	47	3.33	—0.63	8.84	1.49	------	7	19	10	2
1894	76.4	+2.3	109	39	0.63	—3.33	3.50	T.	------	3	22	8	1
1895	72.1	—2.0	104	35	3.40	—0.56	10.10	0.45	------	7	15	12	4
1896	73.6	—0.5	104	42	6.90	+2.94	12.67	1.61	------	9	14	11	6
1897	75.6	+1.5	106	42	3.26	—0.70	7.60	1.01	------	6	18	10	3
1898	73.4	—0.7	102	42	2.98	—0.98	12.88	0.55	------	7	19	9	3
1899	73.1	—1.0	101	38	3.07	—0.89	8.66	0.42	------	7	16	10	5
1900	73.4	—0.7	102	37	6.15	+2.19	18.45	1.80	------	9	16	10	5
1901	82.4	+8.3	113	46	2.34	—1.62	5.97	0.27	------	5	21	9	1
1902	73.1	—1.0	99	41	8.67	+4.71	13.57	4.82	------	13	14	10	7
1903	72.9	—1.2	100	40	4.83	+0.87	12.72	0.94	------	9	17	9	5
1904	70.6	—3.5	100	38	4.41	+0.45	11.97	1.28	------	10	16	9	6
1905	70.6	—3.5	102	40	2.91	—1.05	7.08	0.69	------	9	14	10	7
1906	70.9	—3.2	102	42	3.04	—0.92	7.05	0.26	------	8	18	10	3
1907	73.7	—0.4	102	41	7.27	+3.31	3.66	3.97	------	13	16	11	4
1908	73.0	—1.1	100	42	3.66	—0.30	9.21	0.70	------	8	16	10	5
1909	72.3	—1.8	102	46	4.77	+0.81	12.20	1.20	------	10	15	8	8
1910	74.5	+0.4	108	43	4.86	—2.10	5.69	0.12	------	7	19	8	4
1911	75.5	+1.4	111	38	2.27	—1.69	6.62	0.08	------	7	18	10	3
1912	74.6	+0.5	103	38	3.71	—0.25	7.56	1.17	------	10	17	10	4
1913	76.1	+2.0	108	45	1.82	—2.14	6.23	T.	------	3	21	8	2
1914	76.6	+2.5	109	43	2.27	—1.69	6.50	0.44	------	5	20	8	3
1915	69.5	—4.6	92	40	8.32	+4.36	15.83	3.68	------	14	10	12	9
1916	79.7	+5.6	105	48	1.78	—2.18	6.87	0.10	------	5	23	7	1
1917	74.3	+0.2	106	38	2.27	—1.69	6.06	0.23	------	7	21	8	2
1918	73.1	—1.0	105	40	3.17	—0.79	8.05	0.26	------	8	19	8	4
1919	77.4	+3.3	104	41	2.86	—1.10	7.82	0.39	------	6	22	8	1
1920	72.3	—1.8	102	45	4.22	+0.26	7.49	1.11	------	9	19	9	3
1921	77.9	+3.8	104	41	2.53	—1.43	7.45	0.42	------	7	19	9	3
1922	71.5	—2.6	98	40	6.31	+2.35	11.72	3.13	------	11	14	12	5

T. indicates an amount too small to measure, or less than .005 inch rainfall and less than .05 inch snowfall.

AUGUST

August was the warmest month of the season. The mean temperature for the State averaged two degrees above the normal and the excess was general except over small areas along the south-central border and the extreme northeastern corner. Most of the excess in temperature occurred in the period beginning about the middle of the second week and continuing until the 24th, when the daily mean temperature was continuously above normal, though there were no periods of unusually high temperature and only a few days had very high maxima. Over most of the State the highest temperature occurred on the 24th when a decided change to cooler occurred, the drop in temperature amounting to nearly 50 degrees at a number of stations. The only cool periods occurred immediately preceding and following the principal warm period.

The precipitation was characterized by contrasts and more than 75 per cent of the State had considerably less than the normal for August. A few stations along the Mississippi river in the east-central portion had less than half an inch while in the west-central portion two stations reported more than nine inches. Harlan with over nine inches had but four days with appreciable precipitation and Davenport with only 0.48 inch had appreciable precipitation on eleven days, Le Claire had nine days with .01 inch, or more, and the total amount was only 0.33 inch. In the area of the greatest precipitation some damage resulted to grain that was still in shock and over much of the northern and eastern portions of the State the lack of rainfall interfered with plowing and, in connection with low humidity that prevailed, caused a large amount of corn to ripen prematurely and burned pastures brown and cut short gardens and truck crops.

A large portion of the State was visited by hail storms which caused much damage to crops. The first storm occurred on the 1st and affected portions of Dubuque, Jackson, Delaware, Linn and Jones Counties. Light hail fell over most of the counties mentioned but the severe hail was confined to numerous patches. Dubuque reported one of the most severe storms ever experienced but the greatest destruction to crops occurred in an irregular strip from one-half to four miles wide and forty miles long from the northwest corner of Delaware County southeastward. Hail drifted to a depth of six inches and the total damage was nearly $500,000. The most severe hail storm occurred on the 9th, and covered a large area in the west-central portion, but the greatest damage occurred in Crawford, Shelby, Audubon and Guthrie Counties. The principal damage was to corn but chickens and young pigs were reported killed by the score and two cows were killed. Many thousand acres of corn were damaged in varying degrees and in portions of the area whole sections were hailed out so completely that not a single whole stalk of corn was left standing. In Guthrie County fields were white with hail and ditches two feet deep were completely filled. Four days after the storm there was sufficient hail in ditches to make ice cream. The damage from this storm exceeded $500,000. Another severe storm occurred on the 16th over much of the same counties as on the 9th, but no reliable estimate could be made of the damage done on account of the previous damage.

Severe local wind squalls occurred in the vicinity of Mason City on the 18th and at Cedar Rapids on the 24th that caused considerable damage to small buildings, broke telephone and telegraph wires, leveled corn fields and knocked apples off. The heavy rains of the 30th caused washouts and road traffic was interrupted for several days.

Pressure. The mean pressure (reduced to sea level) for the State was 29.97 inches. The highest recorded was 30.21 inches, at Dubuque and Davenport, on the 14th, and the lowest was 29.59 inches, at Dubuque, on the 31st. The monthly range was 0.62 inch.

Temperature. The mean temperature for the State, as shown by the records of 100 stations, was 73.8°, or 2.0° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 72.9°, or 2.5° higher than the normal; Central, 74.0°, or 2.3° higher than the normal; Southern, 74.4, or 1.2° higher than the normal. The highest monthly mean was 76.8° at Thurman, and the lowest was 69.1° at Postville. The highest temperature recorded was 102°, at Belmond, on the 17th and Clarinda on the 24th, and the lowest was 42°, at Mason City, on the 8th. The temperature range for the State was 60°.

Precipitation. The average precipitation for the State as shown by the records of 102 stations, was 3.06 inches, or 0.62 inch less than the normal. By divisions the averages were as follows: Northern, 2.50 inches, or 0.98 inch less than the normal; Central, 2.82 inches, or 0.95 inch less than the normal; Southern, 3.87 inches, or 0.09 inch more than the normal. The greatest amount, 9.80 inches, occurred at Atlantic, and the least, 0.33 inch occurred at Le Claire. The greatest amount in 24 consecutive hours, 5.83 inches, occurred at Atlantic on the 30th.

Humidity. The average relative humidity for the State at 7 a. m., was 80 per cent, and at 7 p. m., was 60 per cent. The mean for the month was 70 per cent, or 2 per cent less than the normal. The highest monthly mean was 74 per cent at Charles City, and the lowest was 64 per cent at Davenport.

Wind. The prevailing direction of the wind was from the south. The highest velocity reported from a regular Weather Bureau Station was 43 miles per hour at Sioux City, from the north on the 17th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 71, or 1 per cent more than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 73; Davenport, 73; Des Moines, 67; Dubuque, 60; Keokuk, 73; Sioux City, 72; Omaha, Nebr., 80.

Miscellaneous Phenomena. Aurora: 24th, 25th. Fog: 9th, 10th, 22d, 23d, 24th. Hail: 1st, 6th, 8th, 9th, 10th, 17th, 23d, 25th, 26th, 28th, 30th. Halos (Lunar and Solar): 2d, 6th, 26th. Thunderstorms: all dates except 3d, 4th, 5th, 12th, 14th, 16th, 19th, 27th.

Rivers. Low, gradually falling stages prevailed on the Mississippi River and moderate stages with considerable fluctuation, but mostly falling stages prevailed on the Missouri River. A few moderate rises occurred on the interior rivers in the southern portion of the State on the 24th and high stages occurred in the southwestern portion following the heavy rain on the 30th.

COMPARATIVE DATA FOR THE STATE—AUGUST.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	68.4	—3.4	102	36	3.41	—0.27	6.44	1.02	------	8	15	10	6
1891	69.1	—2.7	106	34	4.24	+0.56	13.02	1.23	------	8	13	12	6
1892	71.4	—0.4	102	40	2.24	—1.44	4.69	0.65	------	5	18	9	4
1893	69.4	—2.4	101	30	2.32	—1.26	6.22	0.40	------	5	19	9	3
1894	74.6	+2.8	108	38	1.58	—2.10	4.53	T.	------	4	21	8	2
1895	71.9	+0.1	103	37	4.43	+0.75	10.63	0.67	------	7	17	9	5
1896	71.7	—0.1	104	34	3.52	—0.16	12.25	0.86	------	8	15	11	5
1897	68.9	—2.9	104	35	1.86	—1.82	4.98	0.47	------	6	15	11	5
1898	71.2	—0.6	103	40	3.44	—0.24	10.55	0.58	------	6	17	9	5
1899	74.4	+2.6	100	41	3.68	0.00	10.45	1.12	------	7	17	10	4
1900	77.4	+5.6	103	44	4.65	+0.97	10.43	1.26	------	6	18	10	3
1901	73.8	+2.0	105	40	1.29	—2.39	4.46	T.	------	5	20	9	2
1902	69.1	—2.7	98	37	6.58	+2.90	15.47	1.57	------	11	11	11	9
1903	69.1	—2.7	101	41	6.64	+2.96	17.74	2.55	------	11	12	10	9
1904	69.1	—2.7	97	35	3.43	—0.25	6.75	0.66	------	7	17	8	6
1905	74.3	+2.5	104	44	4.05	+0.37	8.47	1.04	------	9	16	9	6
1906	74.1	+2.3	101	33	3.95	+0.27	10.51	0.92	------	9	17	9	5
1907	71.1	—0.7	99	37	4.33	+0.65	9.67	1.05	------	9	17	9	5
1908	70.0	—1.8	101	38	4.77	+1.09	10.55	1.35	------	9	17	9	5
1909	76.1	+4.3	103	33	1.81	—1.87	8.21	T.	------	5	21	8	2
1910	71.9	+0.1	104	36	3.88	+0.20	11.22	0.37	------	8	15	10	6
1911	71.7	—0.1	107	34	3.32	—0.36	9.47	0.44	------	9	16	10	5
1912	71.0	—0.8	101	40	3.78	+0.10	7.90	0.89	------	10	15	10	6
1913	76.6	+4.8	108	40	2.68	—1.00	7.13	0.08	------	6	17	10	4
1914	73.7	+1.9	103	40	2.19	—1.49	4.90	0.42	------	7	17	10	4
1915	65.9	—5.9	91	30	2.81	—0.87	9.14	0.27	------	8	16	8	7
1916	74.0	+2.2	106	35	2.58	—1.10	6.23	0.49	------	7	18	9	4
1917	69.4	—2.4	102	31	2.29	—1.39	6.31	0.70	------	7	19	8	4
1918	76.0	+4.2	113	38	3.61	—0.07	8.38	0.54	------	8	16	10	5
1919	71.5	—0.3	103	38	2.59	—1.09	5.72	0.97	------	7	19	9	3
1920	69.3	—2.5	98	39	3.35	—0.33	8.52	0.44	------	7	18	8	5
1921	72.1	+0.3	102	37	5.04	+1.36	9.04	2.20	------	8	16	11	4
1922	73.8	+2.0	102	42	3.06	—0.62	9.80	0.33	------	8	19	8	4

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

SEPTEMBER

September was warm and considerably drier than the average. The chief characteristic of the month was a remarkably warm period that prevailed the first eight days. Another outstanding feature was a period of almost continous sunshine that occurred from the 20th until the 27th. The first week ranked with the warmest of the season and over most of the State the highest temperatures of the year occurred. A large number of stations in the eastern and northern portions of the State, including two regular Weather Bureau Stations, reported the highest September maxima of record and the record of one station extends over a period of more than 50 years. Light frost occurred over the northwestern portion of the State on the 10th and on the 11th light frost was general in low lands over nearly all sections. Light frost also occurred on the 16th, 25th, 26th and 27th. Only one station reported a temperature below freezing, but no damage whatever resulted from frost.

The precipitation was below normal over practically the entire State and there was only two shower periods of any consequence, and taking the

State as a whole, more than half of the monthly total occurred during a single 24-hour period. While the precipitation was generally deficient, there was sufficient to keep pastures in good condition and benefited truck crops, but the lack of rain over the northern and western portions of the State caused a suspension of plowing, prevented the germination of winter wheat and caused a shortage of stock water. The weather was unusually favorable for the maturing of the corn crop and at the end of the month not more than 6 per cent was susceptible to injury from frost. Low humidity, hot weather and an excess of sunshine caused some corn to mature too rapidly so it became loose on the cob and lessened the yield somewhat. The dry weather retarded the seeding of winter wheat somewhat, but much seeding was intentionally delayed to avoid the Hessian fly pest.

No severe storms of any character occurred during the month. The only damage reported was from a local wind squall in the northern portion of Cerro Gordo County that blew down a number of telephone poles, frail buildings and trees. Roads were in good condition except somewhat rough after the rainy periods and all outside work was carried on with very little interruption.

Pressure. The mean pressure (reduced to sea level) for the State was 30.07 inches. The highest recorded was 30.54 inches, at Dubuque, on the 16th, and the lowest was 29.62 inches, at Des Moines, on the 1st, and Sioux City, on the 5th. The monthly range was 0.92 inch.

Temperature. The mean temperature for the State, as shown by the records of 100 stations, was 67.1°, or 3.7° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 66 0°, or 4.2° higher than the normal; Central 67.3°, or 3.8° higher than the normal; Southern, 68.1°, or 3.1° higher than the normal. The highest monthly mean was 70.4°, at Fairport, and the lowest was 63.0°, at Postville. The highest temperature reported was 103°, at Belle Plaine and Mason City, on the 6th, and the lowest was 31°, at Washta, on the 11th. The monthly range for the State was 72°.

Precipitation. The average precipitation for the State, as shown by the records of 103 stations, was 2.03 inches, or 1.33 inches less than the normal. By divisions, the averages were as follows: Northern, 1.69 inches, or 1.36 inches less than the normal; Central, 2.24 inches, or 1.22 inches less than the normal; Southern, 2.17 inches, or 1.39 inches less than the normal. The greatest amount, 4 34 inches, occurred at Iowa Falls, and the least, 0.31 inch, occurred at Inwood and Milford. The greatest amount in 24 consecutive hours, 3.05 inches, occurred at Le Mars, on the 18th.

Humidity. The average relative humidity for the State at 7 a. m. was 81 per cent, and at 7 p. m. was 60 per cent. The mean for the month was 70 per cent, or 4 per cent below the normal. The highest monthly mean was 77 per cent at Charles City, and the lowest was 62 per cent, at Sioux City.

Sunshine. The average per cent of the possible amount of sunshine was 71, which is 9 per cent above the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles

City, 71; Davenport, 73; Des Moines, 69; Dubuque, 63; Keokuk, 71; Sioux City, 73; Omaha, Neb., 77.

Wind. The prevailing direction of the wind was from the south. The highest velocity reported from a regular Weather Bureau station was at the rate of 33 miles per hour, from the north, at Sioux City, on the 8th.

Rivers. Low stages prevailed on all rivers with very little fluctuation, but with a falling tendency prevailing. Only once in September has a lower mean stage been recorded at Dubuque.

Miscellaneous Phenomena. Fog: 1st, 2d, 3d, 4th, 14th, 15th, 18th, 19th, 20th, 21st, 22d, 23d, 26th, 27th, 28th. Frost light: 10th, 11th, 16th, 25th, 26th, 27th. Hail: 8th, 17th. Halos: 1st, 10th, 15th. Rainbow: 7th. Thunderstorms: 1st, 2d, 4th, 6th, 7th, 8th, 9th, 10th, 13th, 15th, 16th, 17th, 18th, 19th, 29th, 30th.

COMPARATIVE DATA FOR THE STATE—SEPTEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	59.3	—4.1	96	23	2.97	—0.39	4.85	1.36	------	7	13	10	7
1891	67.3	+3.9	104	28	1.33	—2.03	3.60	0.13	------	4	20	7	3
1892	64.7	+1.3	99	29	1.53	—1.83	4.15	0.16	------	4	16	8	6
1893	64.7	+1.3	102	18	2.34	—1.02	5.49	0.74	------	4	20	6	4
1894	65.1	+1.7	100	26	3.57	+0.21	7.43	0.67	------	8	15	10	5
1895	66.8	+3.4	103	22	3.03	—0.33	7.43	0.85	------	5	18	8	4
1896	58.5	—4.9	95	22	4.09	+0.73	9.96	1.82	------	10	11	9	10
1897	70.9	+7.5	106	26	2.04	—1.32	5.88	0.00	------	4	23	5	2
1898	65.3	+1.9	99	29	2.69	—0.67	8.45	0.41	------	7	16	9	5
1899	62.5	—0.9	104	15	0.93	—2.43	4.32	T.	------	4	16	9	5
1900	64.4	+1.0	99	26	4.98	+1.62	8.82	2.48	------	9	15	8	7
1901	63.3	—0.1	102	26	4.77	+1.41	13.62	1.71	------	9	13	9	8
1902	59.1	—4.3	88	23	4.35	+0.99	10.41	1.65	------	9	15	6	9
1903	60.8	—2.6	94	28	3.81	+0.45	8.79	1.42	------	10	14	6	10
1904	64.0	+0.6	94	30	2.78	—0.58	8.33	0.09	------	7	13	8	9
1905	65.8	+2.4	96	36	3.81	+0.45	13.18	0.50	------	8	14	8	8
1906	67.2	+3.8	100	27	4.16	+0.80	11.10	0.64	------	8	16	8	6
1907	62.8	—0.6	98	25	2.75	—1.61	6.06	1.38	------	8	15	9	6
1908	67.9	+4.5	98	20	1.20	—2.16	3.46	0.25	------	3	21	6	3
1909	62.4	—1.0	94	30	3.58	+0.22	7.34	1.39	------	9	14	8	8
1910	63.2	—0.2	99	30	3.59	+0.23	7.43	1.18	------	9	14	7	9
1911	65.8	+2.4	103	32	5.12	+1.76	13.73	1.19	------	10	11	9	10
1912	62.1	—1.3	104	24	3.98	+0.62	10.12	0.28	------	11	12	8	10
1913	64.5	+1.1	107	19	3.31	—0.05	7.44	0.45	------	9	15	8	7
1914	64.5	+1.1	99	30	7.88	+4.52	16.24	2.48	------	10	16	7	7
1915	63.7	+0.3	91	30	6.03	+2.67	12.45	2.88	------	11	11	8	11
1916	62.5	—0.9	98	21	3.89	+0.53	9.71	1.45	------	7	17	8	5
1917	62.6	—0.8	97	28	2.90	—0.46	8.68	0.39	------	7	15	7	8
1918	58.6	—4.8	93	20	1.87	—1.49	4.62	0.48	------	6	16	8	6
1919	67.5	+4.1	99	33	5.34	+1.98	11.82	1.49	------	8	16	6	8
1920	66.5	+3.1	98	24	3.30	—0.06	7.21	0.69	------	8	17	8	5
1921	67.3	+3.9	99	31	6.72	+3.36	11.95	1.72	------	11	14	8	8
1922	67.1	+3.7	103	31	2.03	—1.33	4.34	0.31	------	6	20	6	4

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

OCTOBER

October was warm and dry, being considerably warmer and drier than October, 1921, and since records of the State have been kept there have been but four Octobers with higher mean temperatures. Of the last 26 consecutive months, this month makes 24 that have been warmer than the normal. There were two unusually warm periods, the first six and the last eight days. At a number of stations in all sections the maxima for October were equalled, and never before have such high maxima occurred so late in the season as occurred on the 27th and 28th. Killing frosts occurred on the 9th over a large area in the northwestern portion and on the 12th over most of the State except a few Mississippi River counties which did not experience a killing frost until the 18th. The corn crop was practically all matured when the frosts occurred and the damage was of very little consequence.

Precipitation was deficient over all sections, though there were local areas in all sections that had an excess, but only one station had an important excess. The lack of precipitation was magnified by the fact that at a large number of stations most of the total occurred on the last two days and at most other stations the greater portion occurred in a single shower period on the 5th-6th.

The weather was favorable for all outdoor work and while the dry weather prevented fall plowing in some sections, conditions were very favorable for gathering corn and at the close of the month a large amount had been cribbed. The dry weather also retarded the germination of some wheat fields but over most of the State the precipitation was ample for germination and the average condition was very good considering that seeding had been generally delayed to avoid the Hessian fly.

The month was free from severe storms and except for short periods the roads were unusually good. Clear days averaged 21 over the State which has never been exceeded by October.

There was a serious shortage of freight cars and this condition prevented the marketing of valuable truck crops. In the chief truck growing center every available warehouse was filled and some fields were not gathered for the lack of storage room.

Pressure. The mean pressure (reduced to sea level) for the State was 30.00 inches. The highest recorded was 30.43 inches at Sioux City, on the 12th, and the lowest was 29.45 inches at Sioux City, on the 28th. The monthly range was 0.98 inch.

Temperature. The mean temperature for the State, as shown by the records of 98 stations, was 56.1°, or 5.3° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 54.4°, or 5.4° higher than the normal; Central, 56.4°, or 5.5° higher than the normal; Southern, 57.4°, or 4.8° higher than the normal. The highest monthly mean was 59.6°, at Columbus Junction, and the lowest was 52.0°, at Estherville. The highest temperature reported was 96°, at Guthrie Center on the 4th, and the lowest was 14° at Little Sioux on the 17th. The temperature range was 82°.

Humidity. The average relative humidity for the State at 7 a. m. was 77 per cent, and at 7 p. m. it was 53 per cent. The mean for the month was 65 per cent, or 6 per cent less than the normal. The highest monthly mean was 74 per cent at Charles City, and the lowest was 59 per cent at Sioux City. The lowest observed was 20 per cent at Keokuk on the 11th, and Sioux City on the 24th.

Precipitation. The average precipitation for the State, as shown by the records of 103 stations, was 1.81 inches, or 0 65 inch less than the normal. By divisions, the averages were as follows: Northern, 2.06 inches, or 0.28 inch less than the normal; Central, 1.66 inches, or 0.83 inch less than the normal; Southern, 1.70 inches, or 0.84 inch less than the normal. The greatest amount, 3.93 inches, occurred at Fayette, and the least 0.06 inch, at Davenport (Pine Acres). The greatest amount in 24 consecutive hours, 2.75 inches, occurred at Fayette, on the 6th and 7th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 72, or 12 per cent greater than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 68; Davenport, 70; Des Moines, 72; Dubuque, 69; Keokuk, 71; Sioux City, 77, Omaha, Nebr., 75.

Wind. The prevailing direction of the wind was from the southwest. The highest velocity reported from a regular Weather Bureau station was at the rate of 42 miles per hour, from the northwest, at Sioux City on the 16th.

Snow. A few light snow flurries occurred in each division, but no station reported more than a trace.

Miscellaneous Phenomena. Fog: 1st, 2d, 3d, 9th, 10th, 14th, 15th, 16th, 26th 31st. Frost (Killing): 9th, 12th, 15th, 17th, 18th. Hail: 11th. Halos (Lunar and Solar): 3d, 4th, 27th, 28th. Sleet: 13th. Thunderstorms. 6th, 7th, 8th, 10th, 13th, 14th, 16th, 20th, 21st, 22d, 30th and 31st.

Rivers. Low and nearly stationary stages prevailed on all the rivers of the State. At most places along the principal rivers the extreme variations of the stages were less than half a foot.

COMPARATIVE DATA FOR THE STATE—OCTOBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	49.2	−1.6	86	16	3.48	+1.02	6.82	1.59	------	7	11	11	9
1891	50.0	−0.8	92	19	2.77	+0.31	6.53	0.85	------	6	18	7	6
1892	54.5	+3.7	96	14	1.55	−0.91	2.58	0.00	0.0	4	21	6	4
1893	52.4	+1.6	94	10	1.28	−1.18	4.56	0.02	0.0	4	16	9	6
1894	51.7	+0.9	90	20	2.67	+0.21	5.25	0.03	0.2	8	14	8	9
1895	46.0	−4.8	88	4	0.47	−1.99	1.38	0.00	T.	2	19	8	4
1896	47.9	−2.9	88	12	3.13	+0.67	5.05	1.51	T.	5	18	6	7
1897	56.8	+6.0	97	12	1.14	−1.32	3.30	0.03	0.0	4	17	8	6
1898	47.5	−3.3	88	17	3.56	+1.10	5.75	1.27	3.6	8	7	9	15
1899	56.7	+5.9	95	17	1.73	−0.73	4.64	0.15	0.0	5	17	8	6
1900	59.3	+8.5	90	21	3.91	+1.45	8.00	1.20	0.0	7	16	7	8
1901	54.2	+3.4	88	20	1.98	−0.48	4.23	0.45	T.	6	17	7	7
1902	53.5	+2.7	83	20	2.54	+0.08	6.66	0.28	T.	5	16	8	7
1903	52.2	+1.4	90	16	1.95	−0.51	4.50	0.32	0.0	5	19	6	6
1904	53.1	+2.3	96	16	1.67	−0.79	4.43	0.14	T.	6	15	8	8
1905	49.2	−1.6	95	16	3.40	+0.94	5.36	1.20	1.6	8	16	6	9
1906	50.5	−0.3	87	7	1.96	−0.50	4.25	0.50	0.1	6	14	7	10
1907	50.4	−0.4	85	10	1.50	−0.96	3.71	0.30	0.0	5	20	5	6
1908	51.1	+0.3	89	17	3.38	+0.92	6.83	0.58	2.6	8	16	6	9
1909	49.7	−1.1	97	10	2.22	−0.24	4.70	0.48	T.	6	16	6	9
1910	55.2	+4.4	93	10	0.77	−1.69	1.73	T.	0.1	4	21	4	6
1911	48.7	−2.1	87	14	3.34	+0.88	7.03	0.73	0.6	10	12	8	11
1912	52.2	+1.4	92	16	2.98	+0.52	5.77	1.03	T.	6	21	3	7
1913	49.2	−1.6	89	−2	3.03	+0.57	7.29	0.35	1.2	9	15	8	8
1914	55.9	+5.1	88	14	3.23	+0.77	6.64	0.74	T.	9	16	6	9
1915	54.4	+3.6	86	19	1.31	−1.15	3.25	T.	T.	5	19	6	6
1916	50.9	+0.1	92	6	2.00	−0.46	4.33	0.20	2.0	8	16	7	8
1917	42.9	−7.9	85	0	1.41	−1.05	4.00	0.15	2.2	6	10	11	10
1918	55.1	+4.3	93	21	3.64	+1.18	7.56	1.36	0.8	7	13	7	11
1919	50.7	−0.1	89	8	3.02	+0.56	8.65	0.45	T.	10	11	8	12
1920	57.7	+6.9	90	11	2.13	−0.33	4.64	0.48	T.	6	19	6	6
1921	54.6	+3.8	90	21	1.96	−0.50	3.61	0.21	T.	6	17	8	6
1922	56.1	+5.3	96	14	1.81	−0.65	3.93	0.06	T.	5	21	4	6

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

NOVEMBER

November was decidedly warm and wet. Since state wide records began in 1890, there have been but three warmer Novembers and only one with more precipitation. The temperature excess was uniform over the state and nearly continuous, there being only five days below normal, and over no portion of the state were there more than two consecutive days below normal. The minimum temperature for the state, 11 degrees, was the highest ever recorded in November and the range in temperature, 63 degrees, the least.

Precipitation as well as temperature, showed an excess at every station. Compared with the state average, the distribution was the most uniform ever experienced in November. Only three times in the last 33 years has the precipitation shown an excess at every station in the state in November. Over 90 per cent of the precipitation occurred during the first 18 days and there were four general rainy periods, the principal one extending from the 11th to the 13th. The rain that occurred on the 5th, in connection with a rather severe storm that passed along the western border, was accompanied by strong winds that blew down some corn, and owing to the soft conditions of the fields corn husking was nearly impossible the greater portion of the first three weeks so that a small per cent that was down started to germinate and rot in the muddy fields. After the 18th the weather was favorable for all outdoor work; corn husking was pushed and at the close of the month 14 per cent or about the normal amount remained to be gathered.

The warm wet weather caused all vegetation to make unusual growth. Pastures were in excellent condition generally, dandelions were in bloom and reports were numerous from all portions of the state of ripe strawberries and hardy vegetables taken from the garden at the end of the month. The weather was generally favorable for winter wheat, particularly the late sown, but some of the early sown was injured by the Hessian fly. Bees were able to make a good flight during the high temperature that was general on the 30th and were ready to go into winter quarters in good condition.

Unusually high wind velocities accompanied the storms that passed over the state on the 5th and 30th. On the 30th Des Moines experienced the highest wind velocity of record for November (52 miles per hour from the southwest) and in the last 45 years there have been but three times in any month that a higher wind velocity has been reached.

The roads were in bad condition most of the first three weeks, and especially bad after the general rain from the 11th to the 13th. It is reliably reported that 1,000 automobiles were stranded on the principal highways leading out of Iowa City following a big home coming celebration on the 11th, to which a large number of persons had motored from surrounding States.

Pressure. The mean pressure (reduced to sea level) for the state was 30.08 inches. The highest was 30.49 inches at Sioux City, on the 24th, and the lowest was 29.30 inches at Sioux City, on the 5th. The monthly range was 1.19 inches.

Temperature. The mean temperature for the state, as shown by the records of 97 stations, was 42.2°, or 7.2° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 40.1°, or 7.3° higher than the normal; Central, 42.7°, or 7.6° higher than the normal; Southern, 43.8° of 6.7° higher than the normal. The highest monthly mean was 45.4°, at Keokuk, and the lowest was 37.6°, at Sanborn. The highest temperature reported was 74°, at Clarinda, on the 4th, and the lowest was 11°, at Decorah, on the 25th. The temperature range for the state was 63°.

Precipitation. The average precipitation for the state, as shown by the records of 100 stations, was 3.54 inches, or 2.03 inches more than the normal. By divisions, the averages were as follows; Northern, 3.58 inches, or 2.17 inches more than the normal; Central, 3.36 inches, or 1.83 inches more than the normal; Southern, 3.69 inches, or 2.11 inches more than the normal. The greatest amount, 5.28 inches, occurred at Iowa City, and the least, 1.96 inches, at Perry. The greatest amount in 24 consecutive hours, 2.08 inches, occurred at Glenwood, on the 1st.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau station was at the rate of 56 miles per hour, from the southwest, at Sioux City, on the 30th.

Snowfall. The average snowfall for the state was 0.3 inch, or 2.2 inches less than the normal. Only twice, in 1912 and 1914 when only a trace was reported, has a less amount of snow occurred in November. The measurable snowfall was confined to the northeastern portion of the state and a small area in the extreme northwest corner. The snow in the northwestern portion occurred on the 12th and in the northeastern portion on the 27th. None of the snow remained on the ground more than three days. In the southern division only three stations reported snowfall, and these only a trace.

Humidity. The average relative humidity for the state at 7 a. m. was 82 per cent and at 7 p. m. 72 per cent. The mean for the month was 77 per cent, or 1 per cent above the normal. The highest mean was 84 per cent at Charles City, and the least was 73 per cent, at Keokuk.

Sunshine. The average per cent of the possible amount of sunshine was 45 per cent, or 7 per cent less than the normal. The per cent of the possible amounts at the regular Weather Bureau stations was as follows: Charles City, 28; Davenport, 45; Des Moines, 53; Dubuque, 31; Keokuk, 53; Sioux City, 47; Omaha, Nebr., 57.

Miscellaneous Phenomena. Fog: 1st, 2d, 3d, 9th, 12th, 13th, 17th, 21st, 28th, 30th. Hail: 4th. Halos (Lunar and Solar): 4th, 10th, 24th, 29th, 30th. Rainbows: 1st, 17th. Sleet: 12th. Thunderstorms: 1st, 3d, 4th, 5th, 10th, 11th, 12th, 13th, 30th. Winds, strong: 5th, 6th, 7th, 23d, 27th, 28th, 29th, 30th.

Rivers. Moderate rises accurred on the Missouri and most interior rivers after the general rain that set in on the 11th, but during most of the month low and nearly stationary stages prevailed. On the Mississippi River low and nearly stationary stages prevailed throughout the month but with a slight tendency to higher stages. All rivers remained open the entire month.

COMPARATIVE DATA FOR THE STATE—NOVEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With precipitation .01 in. or more	Clear	Partly cloudy	Cloudy
1890	38.6	+3.6	78	— 2	1.46	—0.05	3.55	0.71	------	3	15	8	7
1891	30.5	—4.5	84	—24	1.70	+0.19	3.64	0.66	------	7	10	8	12
1892	33.3	—1.7	70	— 3	1.10	—0.41	3.16	0.05	1.8	4	11	8	11
1893	34.0	—1.0	86	—13	1.17	—0.34	2.56	0.05	4.6	4	16	8	6
1894	32.7	—2.3	72	— 5	0.92	—0.59	2.42	T.	0.4	4	9	11	10
1895	34.3	—0.7	86	—12	1.51	0.00	3.01	0.45	4.9	6	9	8	13
1896	29.6	—5.4	82	—15	1.83	+0.32	4.51	0.16	2.9	6	9	8	13
1897	34.3	—0.7	81	—19	0.66	—0.85	2.24	T.	1.2	5	12	8	10
1898	32.2	—2.8	78	—17	1.50	—0.01	3.61	0.33	8.7	6	14	8	8
1899	43.9	+8.9	86	8	1.20	—0.31	2.97	0.13	0.5	5	12	8	10
1900	33.5	—1.5	79	— 6	1.06	—0.45	3.35	T.	3.7	6	12	7	11
1901	35.8	+0.8	77	2	0.86	—0.65	2.30	0.20	2.6	3	18	6	6
1902	41.2	+6.2	79	4	2.13	+0.62	4.19	0.16	1.8	7	9	7	14
1903	34.2	—0.8	76	— 5	0.52	—0.99	1.74	T.	1.1	3	13	8	9
1904	41.0	+6.0	80	4	0.15	—1.36	0.50	0.00	0.5	1	20	6	4
1905	38.4	+3.4	70	—12	2.84	+1.33	5.30	0.90	0.6	5	16	7	7
1906	35.4	+0.4	76	— 5	2.03	+0.52	3.86	0.35	4.4	8	9	7	14
1907	36.7	+1.7	68	— 4	1.03	—0.48	2.27	0.05	0.9	4	17	6	7
1908	39.3	+4.3	80	5	1.56	+0.05	3.31	0.21	1.4	5	14	7	9
1909	42.4	+7.4	84	— 3	5.39	+3.88	11.48	2.07	6.8	10	10	7	13
1910	33.4	—1.6	76	5	0.34	—1.17	1.03	T.	0.7	3	13	9	8
1911	29.9	—5.1	79	— 8	1.42	—0.09	4.99	0.11	1.6	6	11	8	11
1912	40.1	+5.1	77	6	0.98	—0.53	2.38	0.00	T.	2	18	8	4
1913	44.1	+9.1	78	10	1.18	—0.33	3.49	0.20	0.4	6	11	7	12
1914	41.0	+6.0	80	— 4	0.22	—1.29	0.95	0.00	T.	2	19	6	5
1915	40.2	+5.2	83	— 5	1.94	+0.43	4.86	0.30	1.2	6	11	10	9
1916	37.3	+2.3	80	— 8	1.61	+0.10	3.65	0.05	3.6	5	16	6	8
1917	40.7	+5.7	77	3	0.28	—1.23	1.02	T.	1.4	3	14	6	10
1918	39.9	+4.9	76	0	2.11	+0.60	5.10	0.70	4.4	7	13	5	12
1919	33.6	—1.4	68	—12	3.40	+1.89	6.22	1.97	6.3	8	11	7	12
1920	35.4	+0.4	71	5	2.18	+0.67	4.45	0.73	1.2	8	10	5	15
1921	33.6	—1.4	70	— 5	0.58	—0.93	1.61	T.	3.4	5	10	5	15
1922	42.2	+7.2	74	11	3.54	+2.03	5.28	1.96	0.3	9	11	6	13

T. indicates an amount too small to measure, or less than .005 inch rainfall, and less than .05 inch snowfall.

DECEMBER

December was an unusually pleasant month with the temperature very near the normal. The month opened with a mild period extending to the 5th over most of the State, followed by a rather severe cold period that continued through the 20th. Zero weather was general over the entire State. A number of stations in the northern portion of the State reported zero weather on 12 days which gradually diminished to the south and at Keokuk zero was reached on but a single day. From the 21st till the end of the month an unusually mild period prevailed, and while no abnormally high temperatures were experienced, the high record for Christmas was exceeded at many places in all portions of the State. For the State as a whole the temperature averaged 0.1° higher than the normal, the northern half being generally below and the southern half generally above the normal.

The precipitation, 0.37 inch, was with one exception the least of record for December, the same amount having been recorded in 1910. The average number of days with 0.01 inch or more, of precipitation was three and this also equaled the record for December. There were but two periods of general precipitation, 6th-7th, and 14th. On the 6th-7th a light rain over most of the State froze to all exposed surfaces. This thin sheet of ice continued for several days. It was not sufficiently heavy to seriously interfere with rail traffic, but walking, especially in cities, was difficult and dangerous and many accidents to pedestrians resulted. Many automobiles were damaged by skidding and a great many that were without chains slid into ditches and had to be temporarily abandoned.

The month was free from severe storms. The snowfall was unusually light, but during the most severe weather, most of the State was covered sufficiently to prevent serious damage to winter wheat. It did not drift nor interfere with traffic. Building operations were checked temporarily by cold weather but conditions were generally favorable for out door work and at the close of the month very little corn remained to be gathered.

During the cold weather the ice rapidly increased in thickness and some was harvested but the continued mild weather reduced the thickness and made it too soft and spongy to store. More cold weather is needed to insure an adequate ice harvest.

Except for the ice that prevailed during the early part of the month the roads were in good condition, but the alternate freezing and thawing made all roads somewhat rough the latter part of the month.

The Mississippi River at Keokuk reached the lowest stage ever experienced, 3.1 feet below the zero of the gage. The continued low stage caused great trouble and expense to manufacturing interests.

Pressure. The mean pressure (reduced to sea level) for the State was 30.12 inches. The highest recorded was 30.76 inches, at Dubuque, on the 18th, and the lowest was 29.43 inches, at Sioux City, on the 29th. The monthly range was 1.33 inches.

Temperature. The mean temperature for the State as shown by the records of 100 stations, was 24.0°, or 0.1° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 19.8°, or 1.4° lower than the normal; Central, 24.4°, or 0.3° higher than the normal; Southern, 27.7°, or 1.3° higher than the normal. The highest monthly mean was 30.5°, at Keokuk, and the lowest 16.4°, at Sanborn. The highest temperature recorded was 65°, at Thurman, on the 29th, and the lowest was 25° below zero at Decorah, Nora Springs and Rock Rapids, on the 18th The temperature range for the State was 90°.

Humidity. The average relative humidity for the State at 7 a. m. was 79 per cent, and at 7 p. m. was 68 per cent. The mean for the month was 74 per cent, which is 7 per cent below the normal. The highest monthly mean was 86 per cent at Charles City, and the lowest was 68 per cent at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 101 stations, was 0.37 inch, or 0.85 inch less than the normal. By divisions the averages were as follows: Northern, 0.43 inch, or 0.64 inch less than the normal; Central, 0.31 inch, or 0.94 inch less than the normal; Southern, 0.36 inch, or 0.99 inch less than the normal. The greatest amount, 0.97 inch occurred at Wescott, and the least, a trace at Cumberland, Glenwood, Harlan and Thurman. The greatest amount in 24 consecutive hours, 0.71 inch occurred at Humboldt, on the 14th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 50, or 2 per cent greater than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 51; Davenport, 42; Des Moines, 59; Dubuque, 40; Keokuk, 46; Sioux City, 52; Omaha, Nebr., 58.

Snowfall. The average snowfall for the State was 2.2 inches, or 4.0 inches less than the normal. The greatest amount 8.0 inches, occurred at Milford, and the least was a trace at Bonaparte, Clarinda, Cumberland, Glenwood, Harlan, Keosauqua, Stockport and Thurman.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau station was at the rate of 46 miles per hour, from the northwest, at Sioux City, on the 11th.

Miscellaneous Phenomena. Aurora: 17th. Fog: 4th, 7th, 8th, 22d, 23d, 24th, 25th, 27th, 28th. Hail: 4th. Halos (Lunar and Solar): 1st, 17th, 25th, 28th, 29th, 30th, 31st. Sleet: 4th, 6th, 7th, 21st, 27th, 30th, 31st. Thunderstorms: 4th.

Rivers. Low stages prevailed on all rivers. There were sharp fluctuations on the Missouri River and slight fluctuation on the Mississippi due to ice gorges. The Mississippi River at Dubuque closed on the 13th and remained frozen the rest of the month. The lowest stage of record 3.1 feet below the zero of the gage, probably due to the manipulation of the dam, was recorded at Keokuk.

COMPARATIVE DATA FOR THE STATE—DECEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	29.1	+5.2	72	—13	0.45	—0.77	1.40	0.00	------	3	17	7	7
1891	32.3	+8.4	72	—14	2.41	+1.19	4.50	1.21	------	6	14	9	8
1892	18.9	—5.0	68	—29	1.65	+0.43	3.04	0.20	10.9	8	9	8	14
1893	22.0	—1.9	70	—21	1.31	+0.09	2.80	0.46	7.6	7	10	9	12
1894	30.1	+6.2	73	—17	0.95	—0.27	1.75	0.25	1.3	3	15	6	10
1895	25.4	+1.5	63	—16	1.63	+0.41	5.74	0.00	4.1	5	11	9	11
1896	30.8	+6.9	70	—10	0.65	—0.57	1.79	T.	1.6	4	10	8	13
1897	18.0	—5.9	60	—25	1.65	+0.43	3.22	0.61	15.9	6	11	7	13
1898	18.1	—5.8	60	—25	0.48	—0.74	1.70	T.	3.9	3	15	8	8
1899	22.6	—1.3	75	—19	1.61	+0.39	4.28	0.10	4.3	5	12	9	10
1900	26.9	+3.0	63	—10	0.45	—0.77	2.70	T.	2.4	4	13	6	12
1901	20.5	—3.4	64	—31	0.93	—0.29	2.75	0.05	5.4	6	10	9	12
1902	20.1	—3.8	59	—20	2.23	+1.01	5.51	0.67	12.9	8	9	6	16
1903	19.6	—4.3	58	—27	0.41	—0.81	1.96	T.	3.7	4	11	9	11
1904	23.4	—0.5	67	—19	1.44	+0.22	3.68	0.06	12.3	5	12	7	12
1905	27.0	+3.1	62	—11	0.52	—0.70	1.69	T.	4.2	3	19	6	6
1906	25.7	+1.8	65	— 9	1.43	+0.21	2.81	0.37	1.4	6	11	7	13
1907	28.8	+4.9	62	— 9	1.00	—0.22	2.28	0.05	4.7	5	10	7	14
1908	27.2	+3.3	67	—17	0.57	—0.65	2.07	0.05	3.8	3	15	8	8
1909	15.1	—8.8	60	—26	2.18	+0.96	6.10	0.89	13.7	11	10	5	16
1910	23.4	—0.5	57	—14	0.37	—0.85	1.39	0.01	3.0	3	15	7	9
1911	27.9	+4.0	60	—24	2.57	+1.35	4.43	0.62	12.6	7	13	6	12
1912	29.2	+5.3	64	—13	0.74	—0.48	1.75	0.10	1.1	3	18	7	6
1913	32.0	+8.1	65	—13	1.02	—0.20	4.73	0.00	1.3	4	15	5	11
1914	15.7	—8.2	63	—31	1.30	+0.08	2.24	0.57	11.1	9	10	6	15
1915	25.0	+1.1	56	—10	0.69	—0.53	1.70	T.	4.6	5	11	8	12
1916	18.7	—5.2	67	—25	1.04	—0.18	2.00	0.35	6.7	6	15	8	8
1917	14.5	—9.4	62	—40	0.56	—0.66	1.70	0.14	6.7	6	10	9	12
1918	32.7	+8.8	68	— 7	1.30	+0.08	3.30	0.37	5.1	8	9	8	14
1919	15.0	—8.9	52	—36	0.54	—0.68	1.55	0.08	5.8	4	11	7	13
1920	26.4	+2.5	65	—26	1.16	—0.06	2.64	0.26	7.4	5	10	8	13
1921	28.2	+4.3	69	—22	1.02	—0.20	3.72	T.	2.9	4	14	9	8
1922	24.0	+0.1	65	—25	0.37	—0.85	0.97	T.	2.2	3	16	7	8

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

MONTHLY STATE DATA FOR 1922.

MONTH	Barometric Pressure, Inches (Sea level)					Temperature, Degrees, F.				Rel. Humidity, Per Cent					Precipitation, Inches					Number of Days				Sunshine		Wind		
	Mean	Highest	Date	Lowest	Date	Mean	Departure from normal	Highest	Lowest	7 a. m.*	12 noon§	7 p. m.*	Departure from normal¶	Lowest	Average	Departure from normal	Greatest	Least	Snowfall	With .01 inch or more precipitation	Clear	Partly cloudy	Cloudy	Per cent of the possible amount	Departure from normal	Average hourly velocity	Departure from normal	Prevailing direction
January	30.20	30.95	23	29.44	4	19.8	+ 1.9	57	—29	80	63	69	—8	25	0.89	—0.16	2.30	0.32	5.3	4	17	6	8	63	+13	8.5	—0.2	se.
February	30.14	30.97	29	29.24	1	23.7	+ 3.2	70	—20	79	61	66	—8	25	1.59	+0.44	4.56	0.40	1.3	4	14	7	7	65	+ 9	9.8	+0.5	nw.
March	30.05	30.81	1	29.26	6	38.3	+ 5.0	74	— 5	81	64	68	0	26	1.97	+0.20	3.73	0.76	3.4	7	12	6	13	49	— 9	10.0	+0.1	se.
April	30.00	30.58	28	28.92	8	49.9	+ 1.2	87	17	79	59	59	+3	10	3.06	+0.20	6.70	1.04	1.0	9	11	9	10	53	— 7	9.1	—0.8	se.
May	29.92	30.38	28	29.41	18	63.4	+ 2.9	91	34	77	55	58	0	16	3.53	—1.04	8.36	0.47	0	12	13	10	8	59	— 3	8.0	—0.7	s.
June	29.96	30.37	25	29.53	10	72.2	+ 3.1	104	38	74	51	51	—8	21	1.82	—2.56	7.19	0.28	0	6	19	8	3	75	+ 6	6.8	—0.8	sw.
July	30.00	30.35	13	29.46	9	71.5	— 2.6	98	40	79	56	57	0	26	6.31	+2.35	11.72	3.13	0	11	14	12	5	64	—10	6.2	—0.5	s.
August	29.97	30.21	14	29.59	24	73.8	+ 2.0	102	42	80	55	60	—2	30	3.06	—0.62	9.80	0.33	0	8	19	8	4	71	+ 1	5.8	—0.5	s.
September	30.07	30.54	16	29.62	1†	67.1	+ 3.7	103	31	81	51	60	—4	19	2.03	—1.33	4.34	0.31	0	6	20	6	4	71	+ 9	6.2	—1.0	s.
October	30.00	30.43	12	29.45	28	56.1	+ 5.3	96	14	77	45	53	—6	20	1.81	—0.65	3.93	0.06	T.	5	21	4	6	72	+12	6.8	—1.3	sw.
November	30.08	30.49	24	29.30	5	42.2	+ 7.2	74	11	82	68	72	+1	32	3.54	+2.03	5.28	1.96	0.3	9	11	6	13	45	— 7	9.6	+1.4	nw.
December	30.12	30.76	18	29.43	29	24.0	+ 0.1	65	—25	79	63	68	—7	18	0.37	—0.85	0.97	T.	2.2	3	16	7	8	50	+ 2	8.3	+0.2	nw.
Means and	30.04					50.2	+ 2.8			79	58	62	—3		29.98	—1.99			13.5	84	187	89	89	62	+ 1	7.9	—0.3	s.
extremes		30.97	Feb.29	28.92	Feb.8			104	—29					10			11.72	T.										
Normals and	30.02		Jan.†		Feb.‡	47.4				81		66			31.97				30.7	85	166	101	98	61		8.2		nw.
records		31.09	1905	28.69	1902			113	—47					5			19.88	0.00										

†Also on 25th. ‡Also on 28th. §Local mean time. *Normal central time.
¶7 a. m. and 7 p. m. observations only.

COMPARATIVE DATA FOR THE STATE—Annual.

	Temperature					Precipitation in inches			
Year	Mean annual	Highest	Date	Lowest	Date	Annual	Greatest annual	Least annual	Av. snowfall
1890	48.0	110	July 13	—27	January 22	31.30	45.74	16.00	------
1891	47.3	106	August 9	—31	February 4	32.90	49.05	23.48	------
1892	46.6	104	July 11	—38	January 19	36.58	48.77	24.78	34.2
1893	45.7	102	July* 13	—36	January 14	27.59	33.27	19.19	37.2
1894	49.7	109	July 26	—37	January 25	21.94	29.81	15.65	19.2
1895	47.2	104	May 28	—33	February 1	26.77	35.25	18.57	26.0
1896	48.6	104	July 3	—20	January 4	37.23	51.60	28.68	22.6
1897	47.8	106	July* 23	—30	January 25	26.98	36.18	20.21	38.8
1898	47.7	103	August 20	—25	December 31	31.34	55.47	19.51	40.3
1899	47.3	104	September 6	—40	February 11	28.68	42.06	21.79	23.4
1900	49.3	103	August 3	—27	February 15	35.05	47.33	25.05	25.8
1901	49.0	113	July 22	—31	December 15	24.41	37.69	16.35	38.5
1902	47.7	98	July 30	—31	January 27	43.82	58.80	20.14	28.0
1903	47.2	101	August 24	—27	December 13	35.39	50.53	26.41	19.4
1904	46.3	100	July 17	—32	January 27	28.51	38.93	19.34	29.2
1905	47.2	104	August 11	—41	February* 2	36.56	52.26	24.66	38.3
1906	48.4	102	July 21	—32	February 10	31.60	44.34	20.63	32.8
1907	47.4	102	July 5	—31	February 5	31.61	43.90	19.93	24.0
1908	49.5	101	August 3	—18	January 29	35.26	49.98	24.11	22.7
1909	47.4	103	August* 15	—26	February* 15	40.01	53.48	27.20	49.0
1910	48.6	108	July 16	—35	January 7	19.87	27.99	12.11	23.4
1911	49.5	111	July* 3	—35	January 3	31.37	46.77	19.74	35.3
1912	46.4	104	September 8	—47	January 12	28.89	33.13	15.25	39.5
1913	49.7	108	July* 16	—25	January 8	29.95	45.18	20.31	25.4
1914	49.1	109	July 12	—31	December 26	31.93	44.11	23.30	27.5
1915	47.8	99	May 14	—32	January 28	39.53	51.15	27.29	31.3
1916	47.2	106	August 4	—34	January 13	28.90	46.34	22.48	29.5
1917	44.8	106	July 30	—40	December 29	27.81	36.00	20.78	32.4
1918	49.2	113	August 4	—36	February 4	32.78	47.53	25.03	33.4
1919	48.6	104	July* 30	—36	December 10	36.76	48.16	26.88	26.6
1920	48.2	102	July 23	—26	January* 4	31.75	44.00	20.95	21.7
1921	52.2	104	July* 11	—22	December 25	32.03	46.47	20.44	30.7
1922	50.2	104	June 23	—29	January 6	29.98	44.20	19.08	13.5

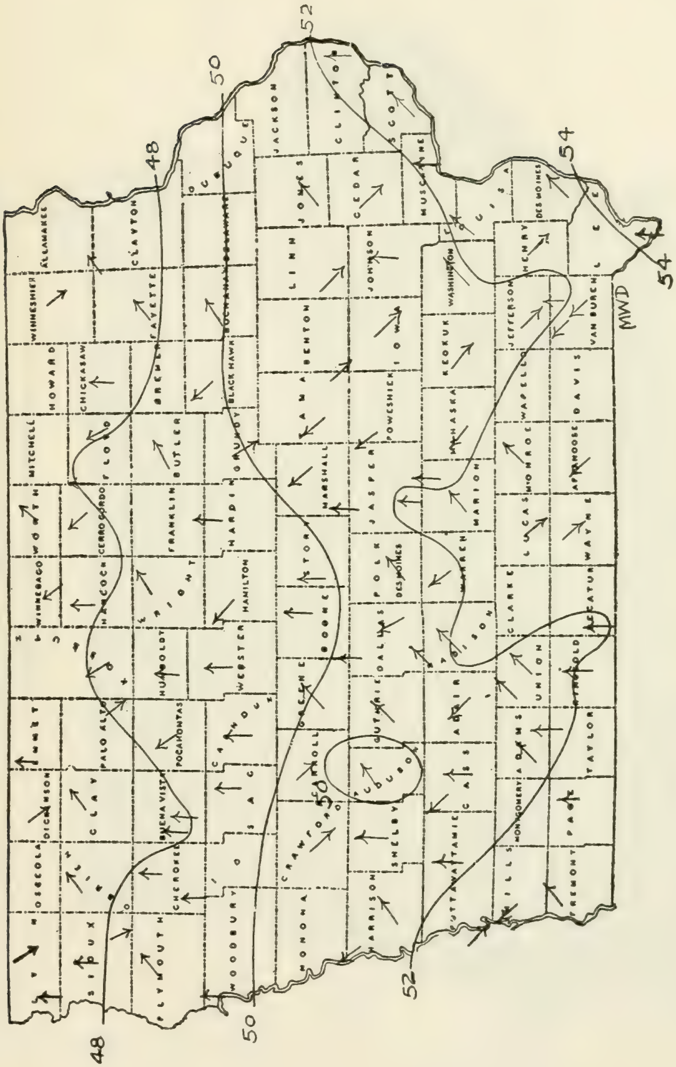
*And other dates.

MONTHLY STATE DATA FOR 1922.

STATIONS	Killing Frosts		STATIONS	Killing Frosts		STATIONS	Killing Frosts	
	Last in Spring	First in Autumn		Last in Spring	First in Autumn		Last in Spring	First in Autumn
Northern Division			*Central Division*			*Southern Division*		
Algona	April 20†	Oct. 9†	Ames	April 18†	Oct. 12	Afton	April 19†	Oct. 12†
Allison	April 29	Oct. 12	Audubon	April 20†	Oct. 12	Albia	April 20†	Oct. 12
Alta	April 19†	Oct. 12	Baxter	April 29	Oct. 10	Atlantic	April 30†	Oct. 9†
Alton	April 20†	Oct. 9	Belle Plaine	April 29†	Oct. 12	Bonaparte	April 20†	Oct. 12†
Belmond	April 29†	Oct. 9†	Boone	April 30†	Oct. 9	Burlington	April 18†	Oct. 17†
Britt	April 29†	Oct. 9†	Carroll	April 19†	Oct. 9	Centerville	April 29†	Oct. 12
Charles City	April 22	Oct. 12	Cedar Rapids	April 20	Oct. 17	Chariton	April 30†	Oct. 12†
Cherokee	April 20†	Oct. 9	Clinton	April 20†	Oct. 18	Clarinda	April 20†	Oct. 9†
Decorah	April 28†	Oct. 9†	Davenport	March 31†	Oct. 17	Columbus Junction	April 20	Oct. 17
Estherville	April 28†	Oct. 10	Denison	April 19†	Oct. 9	Corning	April 29†	Oct. 9†
Fayette	April 30†	Oct. 9	Des Moines	April 19	Oct. 12	Corydon	April 29†	Oct. 9†
Forest City	April 20†	Oct. 9†	Dubuque	April 20	Oct. 18	Creston	April 19†	Oct. 12
Humboldt	April 29†	Oct. 9	Fairport	April 1†	Oct. 17	Cumberland		Oct. 12
Inwood	April 26†	Oct. 9	Fort Dodge	April 29†	Oct. 9	Earlham	April 29†	Oct. 9†
Le Mars	April 20†	Oct. 9†	Grinnell	April 20†	Oct. 12	**Fairfield**	April 30†	Oct. 12†
Mason City	April 29†	Oct. 9	Grundy Center	April 29†	Oct. 12	Glenwood	April 19†	Oct. 9†
Milford (near)	April 19†	Oct. 12	Guthrie Center	April 19†	Oct. 12	Greenfield	April 19†	Oct. 9†
New Hampton	April 22†	Oct. 12	Harlan	April 20†	Oct. 9	Indianola	April 20†	Oct. 12†
Nora Springs	April 28	Oct. 9	Independence	April 28†	Oct. 15	Keokuk	March 31†	Oct. 17
Northwood	April 28†	Oct. 12	Iowa City	April 29	Oct. 10	Keosauqua	April 30	Oct. 12
Pocahontas	April 20†	Oct. 9†	Iowa Falls	April 29†	Oct. 9	Knoxville	April 29†	Oct. 12†
Postville	April 29†	Oct. 9	Jefferson	April 29†	Oct. 9	Lamoni	April 29†	Oct. 14†
Rock Rapids	April 28†	Oct. 9	Little Sioux	April 19†	Oct. 9	Lenox	April 21	Oct. 12†
Sanborn	April 28†	Oct. 12	Logan	April 19†	Oct 9	Mount Ayr	April 19†	Oct. 12
Sioux Center	April 20†	Oct. 9†	Marshalltown	April 20†	Oct. 12	Mount Pleasant	April 29†	Oct. 12†
Spencer	April 29†	Oct. 9	Monroe	April 18†	Oct. 12	Oakland	April 21†	Oct. 9†
Storm Lake	April 20†	Oct. 12	Olin	April 29†	Oct. 9	Oskaloosa	April 20†	Oct. 12
Washta	April 30†	Oct. 9	**Onawa**		Oct. 9	Pella	April 29	Oct. 12
Waverly	April 30†	Oct. 9	Perry	April 20†	Oct. 9	Sigourney	April 30	Oct. 9
West Bend	April 26†	Oct. 9	Rockwell City		Oct. 9	Stockport	April 30†	Oct. 10†
			Sac City	April 22†	Oct. 9	Thurman	April 19†	Oct. 9
			Sioux City	April 12	Oct. 9	Washington	April 20†	Oct. 17†
			Tipton	April 29†	Oct. 15	Westcott (near)		Oct. 17
			Toledo	April 29†	Oct. 12	Winterset	April 29	Oct. 9
			Waterloo	April 29†	Oct. 9	**Omaha, Neb.**	April 19	Oct. 12
			Waukee	April 20	Oct. 9			
			Webster City	April 29†	Oct. 9			
			Williamsburg	April 29†	Oct. 10			

†Date of last temperature of 32° or lower in the spring, or first temperature of 32° or lower in the autumn (as the case may be) when frost was not reported.

MEAN ISOTHERMS AND PREVAILING WINDS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BLACK HAWK
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DELAWARE
DUBUQUE
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WINNEBAGO
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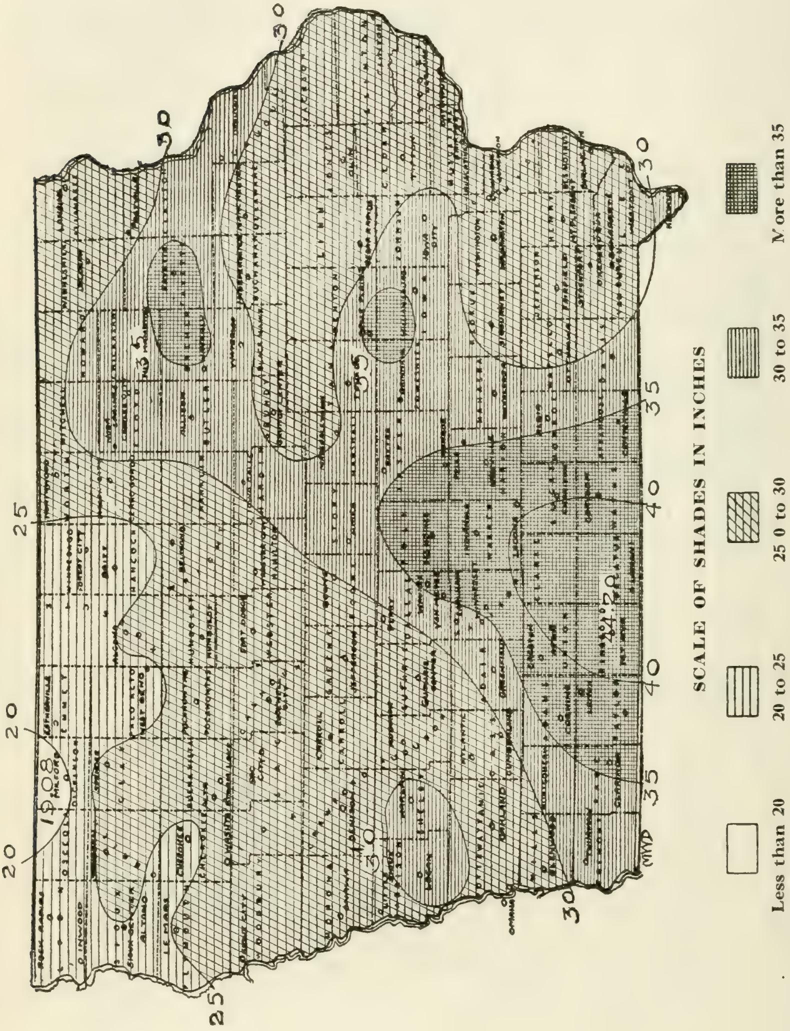
DAVIS
VAN BUREN
LEE

TOTAL PRECIPITATION, YEAR, 1922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SCALE OF SHADES IN INCHES
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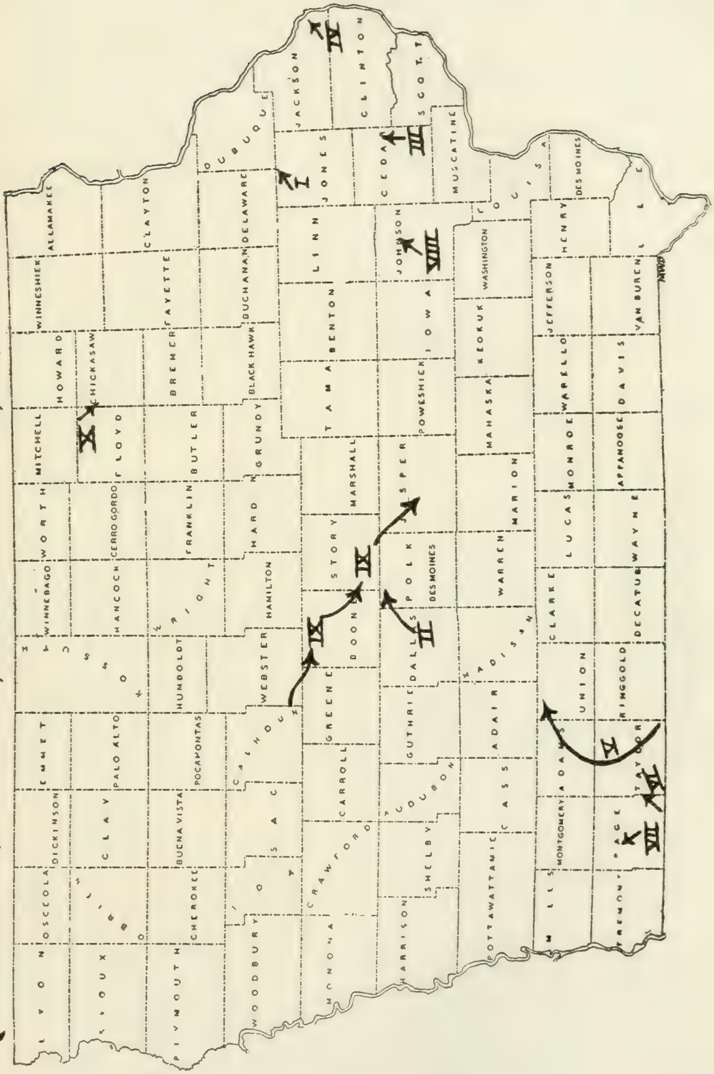
More than 35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RINGGOLD
DECATUR
WAYNE
APPANOOSE
DAVIS
VAN BUREN
LEE

TORNADO PATHS IN IOWA DURING THE YEAR 1922.
(Numerals Refer to Descriptive Data in Accompanying Table)

TORNADOES IN IOWA DURING THE YEAR 1922.

Storm No.	Nearest towns	Date	Hours, From—to	Storms moved from	Length of path	Persons killed	Persons injured	Estimated damage
I	Monticello	February 1	12 noon	S. W. to N. E.	Short	0	0	$ 1,000
II	Dallas Center to Sheldahl	April 6	8.30 to 8:45 p. m.	S. W. to N. E.	16 miles	1	6	200,000
III	Bennett	April 8	9:30 p. m.	S. to N.	10 miles	0	0	1,000
IV	Preston	April 8	10:30 p. m.	S. W. to N. E.	Short	0	0	1,000
V	Athelstan to Creston	April 10	4:30 to 6:00 p. m.	S. to N.	40 miles	0	0	10,000
VI	Braddyville	April 10	4:00 p. m.	S. W. to N. E.	6 miles	0	0	2,000
VII	Page Center	May 5	4:30 p. m.	S. E. to N. W.	18 miles	0	0	1,000
VIII	Tiffin to North Liberty	May 8	4:30 to 4:45 p. m.	S. W. to N. E.	17 miles	0	0	30,000
IX	Gowrie to Newton	July 16	4:30 to 7:00 p. m.	N. W. to S. E.	30 miles	0	0	500,000
X	Colwell	July 30	5:15 p. m.	N. W. to S. E.	3 miles	0	0	10,000
				Totals	140 miles	1	6	$756,000

WEATHER AND CROP REVIEW

The winter preceding the crop season of 1922 was warmer and slightly more moist than normal with snowfall of only 9.5 inches for the three winter months, which is the least of record and 2.5 inches less than the winter of 1906-1907 which has heretofore held the record. The storm of January 4th-5th left a coating of ice over the southern and part of the central counties that remained for several days. Another ice or "glaze" storm February 21st-23rd damaged fruit and shade trees. It was feared that these two storms would kill considerable winter wheat and tame grass but for some reason only two per cent of the winter wheat was killed, which is far less than the average.

Considerable precipitation in February and toward the last of March made the soil too wet to work until well into April. Scarcely a beginning had been made in spring seeding during the first ten days of April, but drying weather the rest of the month permitted rapid progress in seeding and toward the close of the month there was some complaint in the drier western counties that soil moisture was not sufficient to germinate oats. Not much spring wheat was sown.

The rather unusual warmth and moisture advanced vegetation rapidly but did not swell the fruit buds to the danger point and no frost damage to fruit occurred.

Livestock in general wintered well. Sows bred for spring pigs increased 29 per cent over the proceeding spring, but the superabundance of cheap corn and the scarcity of ready cash to buy supplemental feeds, caused the sows to be fed an unsuitable ration. Cholera, "flu" and other diseases weakened the sows so that the size, vitality and uniformity of litter were considerably reduced, and the unfavorable weather of April caused considerable loss of pigs. Though May did not warm up as rapidly as usual, it was dry and sunshiny and with coming of tender shoots of grass, the condition of sows and pigs improved rapidly.

Preparations for corn planting proceeded without interference, except in a few central and eastern counties where heavy local rains occurred May 23rd-26th. 60 per cent of the acreage was planted by May 15th, and 96 per cent by June 1.

Drouth continued in June, the average rainfall for the month, 1.82 inches, being as little as June, 1911, when one of the more notable drouths of the State set in. Temperatures were very high, the warmest day of the year in the northwest portion of the State being June 23, when temperatures of 100° or higher occurred. Inwood reported 104°. Corn was not materially injured though the leaves curled some on hot afternoons. By the close of the month the earliest corn was more than waist high and about half of the crop was laid by. Oats headed very short—too short to harvest in some localities in the west central and northwest counties, yet thrashing returns showed yields slightly above the 10-year average over most of the State and the quality was much better than last year. Winter wheat, spring wheat and barley were not injured as much as expected, the yield and quality being generally satisfactory.

In contrast with June, July was cool and wet, which went far to repair the crop damage. In only a few northern counties did the temperature get as high as 90°. Beginning with a general rainstorm July 5th-7th, frequent copious rains broke the drouth. Much damaging had attended the rain, yet the benefits of the storms far outweighed the damage. Some of the storms had tornadic characteristics in small areas. Small grains, standing and in shock, were damaged by the wind and rain. Yet harvest progressed well. Much fruit was blown from the trees, but an abundance remained for full development.

August was the warmest month of the year, the greatest temperature excess occurring about the 15th-24th, followed by an abrupt change to 50° colder at a number of stations. Excessive rainfall in some southwest counties was centered in Shelby county, where 9.46 inches fell at Harlan, but for the State as a whole precipitation was deficient. Shocked grain was damaged in the wet area, while corn, pastures and truck crops were injured by drouth in some eastern counties. Much of the State was visited by severe hailstorms and there was considerable damage from wind squalls.

September was warm and considerably drier than the average, the warmest period being the first eight days, during which over much of the State the highest temperatures of the year occurred. Many northern and eastern stations had the highest September temperatures of record—at one station the highest in 50 years. Slight frosts occurred on the 10th, 11th, 16th, 25th, 26th and 27th but no damage resulted. Silo filling and fodder cutting made good progress. The corn stood up much better than last year, and there was much less damage from corn ear worm. Commercial sweet corn and tomato canning proceeded under favorable conditions, the quality of the pack being very good and the quantity considerably larger than last year. Deficient rainfall impeded plowing and preparation for winter wheat seeding, and together with the heat wave, is thought to have shortened the corn yield slightly, but this was off-set by hastening the maturity of the corn. Winter wheat seeding was delayed to avoid Hessian fly, which was unusually numerous till the close of the month.

The first six and last eight days of October were unusually warm. Killing frosts occurred on the 9th over a large area in the northwest portion, and on the 12th over most of the State, except a few Mississippi River counties which did not experience a killing frost till the 18th. About 97 per cent of the corn matured without frost damage. The crop dried rapidly and much was cribbed toward the close of the month. Winter wheat seeding progressed rapidly at the beginning of the month and 85 per cent was finished by October 10. Moisture was generally sufficient for germination of the wheat which made good growth until near the close of November. Considerable damage to early seeded wheat by Hessian fly was reported.

An unusual windstorm November 5 blew much corn to the ground over the western two-thirds of the State. Current and subsequent rains damaged the down corn, which lay in the muddy fields at temperatures high enough to cause rotting and sprouting. Husking was considerably delayed by the wet fields through which full loads of corn could not be drawn. Another windstorm Thanksgiving Day, November 30, the most severe in many years, caused further damage to the remnant of corn remaining in the fields.

Iowa's 1922 corn crop is the second largest of record. The old corn on Iowa farms November 1 was estimated at 39,668,000 bushels; new corn, December 1, 455,535,000 bushels; total corn 495,203,000 bushels; compared with a total of 502,344,000 bushels in 1921, and 506,943,000 bushels in 1920. New corn is 28 per cent above pre-war normal; old corn 159; and total corn 33 per cent above pre-war normal. Fortunately, Iowa farmers are much better provided with livestock to consume this corn than they were last year and the corn production for the country as a whole is less.

It is unusual that both warm weather and cool weather crops produce well in the same season, but in 1922, practically all crops yielded above the 10-year average and fruit, particularly apples, made an unusually large crop. The total value of crops is 57 per cent greater than a year ago.

Bulletin No. 1, April 11, 1922—

A rather mild winter with the least snow in 32 winters preceded the crop season of 1922. The ground froze more deeply than usual. March was warm with an excess of precipitation in the central and south portions. Winter wheat, rye, grasses, alfalfa and clover wintered well in spite of the deficiency in moisture and snow cover during much of the winter. The recent moist, warm weather has been favorable for these crops.

Scarcely a beginning has been made in seeding of oats and spring wheat, due to the frequent, heavy rains. The soil is generally saturated and packed. Several days of sunshine are needed to put the soil into condition to work. At this date last year approximately 85 per cent of the oats had been seeded but they met disaster in the severe freeze that came later, from which they never fully recovered. Not much spring wheat will be seeded.

A few potatoes have been planted and some gardening has been done. Fruit prospects are believed to be unusually promising in most sections, yet there is danger that the prevailing warmth and moisture may rush the buds forward too fast.

Numerous small tornadoes and local windstorms did considerable damage. Severe hailstorms visited Council Bluffs and Diagonal. Dirt roads are generally impassable.

Livestock in general wintered well. The number of sows bred for spring pigs is about 25 per cent greater than last year, but the reports on early spring pigs are very discouraging. It appears that the superabundance of cheap corn on the farms and the scarcity of ready cash to buy the supplemental feeds needed by brood sows has resulted in overfeeding the sows with corn. Besides, cholera, "flu" and other diseases caused many of them to fail to conceive or greatly reduced the size and vitality of the litters. Contagious abortion is prevalent. The cloudy, rainy weather has been very unfavorable for the young pigs. So the net result will be much less than a 25 per cent increase in pork production.

Bees generally wintered well. Though the weather has been unusually cloudy and rainy, it has been warm, and occasional periods of sunshine have afforded the bees ample opportunity for cleansing flights and a little chance to work on maples.

Bulletin No. 2, April 18, 1922—

Cool cloudy weather with rain or snow prevailed at the beginning and close of the week, but Thursday, Friday and Saturday (13th-15th) were favorable for field work in many counties. Frost and freezing temperatures were general on the mornings of the 12th and 18th, but nothing was susceptible to damage.

Spring seeding and work in general is unusually variable in adjacent counties or localities. Seeding of oats averages about 40 per cent completed, ranging from none in some of the northeast counties to between 75 and 90 per cent in a belt extending from Palo Alto county southeast to Polk and thence southwest to Adams, Taylor and Ringgold counties.

An increase in barley acreage is mentioned by some correspondents. Barley will stand a little later seeding date than oats. Mention is also made of the possibility that the backward season may divert some of the intended oats acreage to corn, to the extent that the 1922 corn acreage may be larger than the 1921 which, with a normal season, would mean a repetition of the overproduction of corn. However, the outlook for weather this morning (18th) is for several days of fair weather with rising temperature, so that there is yet time for active work in seeding oats. In some localities early seeded oats are up and showing green.

Winter wheat, rye, pastures and meadows look unusually good. Pastures in the south half of the State are already affording considerable grazing and by May 1 will take the place of nearly all dry feed.

Spring pig reports are very disappointing, due to the causes mentioned last week and to the cool, damp and cloudy weather.

Favorable wintering of bees is being offset by the unfavorable spring weather which does not permit the bees to work. "Spring dwindling" is becoming serious.

Fruit bloom has been benefically retarded in most of the State but peaches and plums are in full bloom in the extreme southern counties where there is a possibility of some damage by the freezing temperatures of Tuesday morning (18th), though of course it will take several days to accurately judge the amount of damage, if any. Otherwise the fruit outlook is promising.

Bulletin No. 3, April 25, 1922—

Mostly dry weather till the rain of Monday, 24th, with sunshine above normal and considerable wind dried the soil so that field work made excellent progress—the best of the season.

The bulk of the oats and barley seeding was finished, though little more than a beginning has been made in some of the extreme northern counties. Some localities report the work completed and most of the fields up and showing green. The favorable weather of the past week removed the necessity for shifting oats acreage to corn. Speculative prices of clover seed have decreased the intended acreage of clover.

Plowing for corn got a good start in the central and southern districts. The prospects for an increased acreage are not as strong as seemed probable earlier in the season.

Temperatures were generally below normal, with frost, freezes and ice on the 19th. These with the freeze of the 17th and 18th are believed to have caused slight damage to plums, pears and peaches in the southern district, but in the central and northern districts buds were not far enough advanced to be injured. Only a few early plums are in bloom in the central districts. All fruit buds are dormant in the northern districts. Apple buds have not opened yet.

Pastures and meadows did not make much progress due to the cool weather, yet live stock have been put on pasture quite generally.

Gardens, potatoes and commercial onions were planted this week to a considerable extent.

A flood crest passed down the Mississippi River this week, inundating considerable low land.

Bulletin No. 4, May 2, 1922—

Cool, dry and mostly cloudy weather permitted rapid progress in field work, retarded the germination and growth of spring grains and the growth of winter wheat and grasses, and beneficially delayed the blooming of fruits.

Horses and men were able to perform a maximum of work under the prevailing dry, cool conditions. At least half the preparation for corn planting has been done. Planting was begun on dry, rolling uplands in many localities about the 28th and 29th, Pocahontas County being the most northerly county reporting this. The soil is yet too cold to make general planting advisable.

Oats seeding is practically completed in all but the extreme northern counties and some wet lowlands elsewhere. In the central and northern districts about one-third of the seed lay ungerminated in the dry soil, but in the localities covered by the showers of May 1-2, these oats will come up quickly. Where the moisture is sufficient, the oats are up to a good stand and look green and fine. In some localities in the southern counties there is complaint of too much moisture on lowlands.

Winter wheat, rye and grasses made slow growth. Hay, pastures and spring wheat need more rain in the northern and central counties.

Commercial onion and potato planting is about finished under favorable weather and soil conditions.

Frosts occurred on several mornings. On the 29th, temperatures slightly below freezing occurred as far south as the south line of the State. Strawberry blossoms were damaged considerably in the south, but were not far enough advanced for damage elsewhere. Plums, peaches and cherries were in full bloom this week in the central counties, but not yet open in the north. Apples are about to open. The frosts and freezes are not believed to have damaged tree fruits appreciably. Spraying has been active.

The recent dry weather has been more favorable for young pigs and chickens.

Roads were better than usual during the last week of April.

Bulletin No. 5, May 9, 1922—

Warm, mostly dry and sunny weather was favorable for field work, growth of small grains and grasses and the development and fertilization of fruit blossoms, except in the northwest district where the drouth was unfavorable till relieved by the rain of Monday, 8th.

Corn planting has begun in practically all sections and as usual is farther advanced in the Raccoon and middle Des Moines valleys than elsewhere. At least one-third of the planting is done in that portion of the State. The seed bed is warm but rather cloddy. A good soaking rain would be beneficial.

Oats seeding was completed in the northern counties. Over much of the State oats fields are green and beautiful. In the northwest counties considerable seed lay ungerminated in the dry soil but the recent rain will give this a start.

Winter wheat and rye have made very good progress. Moisture has been ample over the winter wheat districts of the State. Grasses, clovers, alfalfa and pastures have made good growth, except in the northwest district where it has been too dry.

All fruit prospects are good. Damage by frosts and freezes of last week were unimportant. Apples are in full bloom in the south and opening rapidly in the central districts, with a better outlook than usual. Spraying has been active. Hail damage was reported in a few localities on the 5th and 8th.

Gardens and gardening made good progress, though more rain would be beneficial in most localities. About one-third of the sugar beet area was planted this week.

Bulletin No. 6, May 16, 1922—

Abnormally warm weather at the beginning of the week followed by cooler on the 13th with abundant sunshine over much of the State and little rain except in a few southeast counties, favored rapid progress in plowing for corn, corn planting and other field work, but was unfavorable for germination of corn and growth of small grains, grasses and gardens.

About two-thirds of the corn has been planted, ranging from nearly completed in the upper Raccoon Valley to less than half done in the extreme south central, extreme northeast and extreme northwest counties. Much of that planted in the last 10 days in the western half of the State lies ungerminated in the dry soil. The early planted fields are up and show rows except in dry patches. Corn cultivation has begun in Pocahontas county. Recently prepared seed beds were so dry that they plowed up cloddy and are in poor condition. A good soaking rain is badly needed except in the southeast portion of the State.

Oats that were up before the dry weather came have made fair progress, but in the drier west central and northwest counties in many fields the oats still lie ungerminated in the dry soil. In Crawford county some land seeded to oats has been plowed up and will be planted to corn as it is believed to be too late for these oats to grow and make a crop. The drouth is opening large cracks in the soil.

Winter wheat and rye need rain but are not suffering seriously. Rye has begun to head out in the southern counties.

The recent dry, warm, sunny weather has been favorable for young animals, especially pigs. The later farrowed litters are much better than the earlier due not only to the weather but to the effect of succulent grass on the condition of the sows.

Tree fruits are in full bloom in the northern counties. In the central and southern counties a large quantity of fruit has set on. Strawberries are blooming profusely in the central counties but the crop will be disappointing throughout the State if rain does not come soon.

Bulletin No. 7, May 23, 1922—

Insufficient rain except in the northeast and southeast districts, temperature slightly below normal and sunshine deficient in the eastern and central districts were unfavorable for the best progress of crops. In some western counties the drouth was becoming serious, but rain is falling over most of the State this morning (23d) and the amounts are already large enough to break the drouth in the southwestern counties.

Corn is coming up very unevenly. In dry patches it has not yet come through the ground while the earliest under favorable conditions is three to four inches high and has been cultivated once. Planting is about 90 per cent completed. Dry, cloddy soil has greatly retarded this work in the south central and southeast counties.

Oats that were up and well established before the drouth are doing fairly well. but much of the acreage shows a thin stand with large areas still ungerminated or making a struggle to come through the ground. The outlook for an oats crop is not very good at this time.

Winter wheat has made fair progress but will be benefited by the rain that is falling. The same is true of grasses, pastures, alfalfa, gardens and all other crops in most of the State. Rye is heading in the central districts.

Strawberries have set an unusually heavy crop but rain has been badly needed. Grapes are beginning to bloom in the central districts. The Secretary of the State Horticultural Society reports the condition of fruit and vegetables on May 15th, as follows: "Apples 92; pears 86; plums 95; cherries 91; strawberries 92; grapes 90; red raspberries 79; black raspberries 88; blackberries 81; gooseberries 80; currants 93; peaches 91; early potatoes 90; late potatoes 89; early cabbage 89; late cabbage 90; onions 94; sweet corn 95; tomatoes 94 per cent.

Bulletin No. 8, May 30, 1922—

Three weeks with deficient rainfall constitute a serious and damaging drouth in the west-central and northwest districts, while in the southern and eastern districts rain has been copious and in some localities damaging. Considerable lowland has been overflowed in the lower Des Moines valley.

Corn planting and cultivation has been delayed in the extreme southern and eastern counties, where about 10 per cent of the planting remains to be done.

Oats have been seriously damaged in the drier districts, where the stand is thin and the general appearance of the crop is poor.

Winter wheat is heading short in the southern and eastern counties, yet it is believed that prospects for this crop are generally good. Rye looks generally good.

Grasses and pastures are poor in the west-central and northwest districts. In these districts the hay crop from timothy and clover will be light, but alfalfa promises a fair crop.

The fruit outlook continues good except that strawberries badly need rain in the west-central and northwest districts. The berries are beginning to ripen in the central districts.

Bees have done exceptionally well in recent weeks. The honey flow has been large enough and the weather suitable for abundant brood rearing. As a rule, colonies are approaching the main flow of honey from white clover, sweet clover and linden in strong condition and should make good returns from these sources which promise well.

Bulletin No. 9, June 6, 1922—

Drouth continues in the west-central and northwest counties, where oats and spring wheat have been seriously damaged and all other crops more or less damaged. Much corn lies ungerminated in the dry soil.

In about four-fifths of the State moisture has been ample, but throughout the State temperatures have been deficient during the past week, to the extent that furnace fires were needed. The minimum temperatures were low in the 40s on several mornings with light frost at Buck Grove, Crawford county, on the 31st.

Corn has mostly been cultivated once except in the dry, backward counties; and cross cultivation is well started. For the State, as a whole, the percentage condition of the crop on June 1st was 92 per cent as shown by about 1000 reports. This is about the 10-year average. The recent rains have softened the clods in the southern and eastern counties so that cultivation is much easier. Considerable replanting has been necessary in these counties on account of heavy rains and the depredations of cut worms and wire worms. Reports from 1000 correspondents show that 60 per cent of the corn was planted up to May 15th, and 96 per cent, up to June 1st. The former is somewhat more than usual.

Winter wheat is heading rapidly, mostly on short straw, but with fair prospects for a crop. Rye is making good progress, being in full head generally and filling well in the southern counties. Barley is doing well except in dry territory.

A very good first cutting of alfalfa has been or is being harvested in the Missouri River counties. The quality is excellent, due to the prevailing dry weather with ample sunshine, which has been favorable for curing. Red clover is being cut in the southern counties and is blooming freely in the north. Timothy promises well except in the dry counties.

Fruit prospects are excellent, especially peaches. Strawberries are somewhat disappointing due to drouth in the northwest and west-central counties and excessive rains in the south and east. Grapes are about in the middle of their blooming period.

Commercial cabbage setting is progressing under favorable conditions in Mitchell county. Onions were so nearly overcome by weeds that many fields were plowed up and replanted. Commercial tomatoes are all planted in Mahaska county but considerable trouble with cut worms is reported.

The honey flow from yellow sweet clover has begun, having been hastened somewhat where drouth prevails.

Bulletin No. 10, June 13, 1922—

Warm and mostly dry weather with abundant sunshine was favorable for corn and other warm weather crops over most of the State, though the light showers of the week failed to break the drouth in the west central and northwest counties where all crops are suffering for rain.

Corn grew rapidly, the tallest now being from six inches to "knee" high. Cultivation made good progress. Much of the crop has been cultivated twice. Conditions were fine for weed killing and fields are mostly clean. Planting and replanting was finished during the week.

Oats need rain badly almost everywhere, and in the drouth stricken west-central and northwest counties this crop will be poor. However, this crop shows improvement in the extreme southern counties. Other spring grains are not very promising.

Winter wheat made good progress generally and the heads are filling nicely, but considerable damage from Hessian fly is reported in Polk county.

First cutting of alfalfa continued under favorable condition for curing and a good crop, of excellent quality, has been secured. Red clover is generally heavy except in the drier regions. The hay crop other than alfalfa will be light in the western counties.

Strawberries have yielded well except in the dry counties. About a week's picking remains in the central counties and 10 days to two weeks in the extreme north. Early cherries are ripening rapidly and a large crop is indicated. Apples, pears and peaches have had a considerable "June drop," especially where the winds have been strong, but an abundant crop remains on the trees.

Commercial cabbage setting was completed in Mitchell county this week. Onions and tomatoes made good progress. A few early tomatoes are in bloom.

Honey producing plants are loaded with bloom or buds and a large flow of honey is in prospect with the bees in good condition to harvest it.

Bulletin No. 11, June 20, 1922—

Mostly hot, dry weather with nearly normal sunshine and strong drying wind was favorable for second and third cultivation of corn and for cutting clover hay but unfavorable for oats, spring wheat and potatoes. Drouth continues in the west central and northwest counties though slightly relieved by showers in a few localities.

Much corn is now "knee high"; the second cultivation is generally completed and the third well advanced. This with good weed killing weather makes the fields mostly clean and the general condition of the crop good, though poor stands are reported from many dry localities.

Oats continued to deteriorate in the drouthy counties where they are heading too short to be cut with a binder and will be mostly cut with a mower. In some instances stock is being turned in to pasture oats, which are not worth cutting. The hot, dry winds with temperatures high in the 90's the first half of the week, caused oats to head short and fill poorly over much of the State.

Winter wheat made fair progress in filling and a few fields are turning color, but more moisture would be beneficial. More than usual damage from Hessian fly is reported in Madison and Polk counties, particularly in fields that were seeded before September 15.

Early potatoes are in bloom, but the prevailing hot, dry weather is untimely for this crop. Colorado potato beetles are unusually numerous and much spraying is being done to save the crop.

The honey flow from linden and white clover is at its height in the central and southern counties, somewhat earlier than usual. Bees were generally in good condition to harvest the crop and a large production seems assured. The best colonies of bees in Scott county have already stored 150 pounds of surplus honey.

Early cherry harvest is progressing rapidly with very satisfactory results. The later strawberries were cut short by the hot, drying winds and dry weather and picking is about over.

The timothy hay crop is reported as unpromising, also clover in the dry west central and northwest counties, but first cutting of alfalfa yielded a good crop which with favorable weather was harvested in excellent condition and the second growth of alfalfa is vigorous and promising.

Flax is looking well and beginning to bloom in the northern counties, to which it is largely confined.

Bulletin No. 12, June 27, 1922—

Mostly hot, dry, sunny weather with brisk, drying winds on some days was unfavorable for nearly all crops, though favorable for cultivating corn and harvesting clover hay during the past week.

The drouth and heat were sufficient to curl the corn leaves in the afternoons in the west central, northwest and north central districts where temperatures near 100 occurred on the 23d, the highest being just 100 at Cherokee. In other sections corn has not been injured much but would be benefitted by a good soaking rain. The earliest corn in all portions of the State ranges from knee high to waist high, shades the ground, and much has been "laid by," but for the State as a whole the height averages about 15 inches, the late planted is fighting a losing battle with the drouth and much of it shows a poor stand. The fields are generally clean. Chinch bugs are damaging corn in Lee county.

Oats are mostly in the critical milk stage. They have headed very short, and nothing but a long period of abnormally cool, moist weather can prevent a poor crop. Cattle have been turned into many fields that are too short to cut. However, a few of the earliest fields promise a fair crop.

Winter wheat is turning rapidly and considerable has been cut in the southeast counties. Good yield and quality are indicated, but more damage from Hessian fly is reported than for many years. Spring wheat, which is mostly raised in the drier counties along the Missouri and Big Sioux rivers, is generally in poor condition.

Clover harvest progressed rapidly with conditions favorable for curing. The yield is good except in western counties where the drouth set in early. Timothy needs rain badly. Second crop alfalfa will be short unless good rains come soon in the western counties, where it is mostly raised. Pastures are drying up and turning brown like late July or August.

Early cherries are about all gathered. The yield has been good. Cane fruits are seriously needing rain.

Potatoes and gardens have been greatly injured by the heat and drouth, though truck crops in Mitchell county are still in good condition.

Bulletin No. 13, July 4, 1922—

Good rains in western Iowa temporarily relieved the long drouth, but came too late for oats, spring wheat, clover and timothy hay and potatoes which suffered irreparable injury. Deficient rain elsewhere is unfavorable for filling of oats which are generally in the milk or dough stage, though some early fields have been harvested.

Early planted corn made good progress. More than half the crop has been laid by in good condition. Late corn has had a hard battle with the drouth. Several stations report the lightest June rainfall in 28 years. Corn varies in height from six inches to six feet. As a whole the outlook for this crop is good.

Winter wheat harvest is progressing rapidly and while there are a few adverse reports, the yield in general will be above the average and of excellent quality. Rye harvest is about finished with satisfactory results.

Clover and timothy haying was favored by the absence of rain. The quality of the crop is excellent, though the yield has been somewhat reduced by the drouth.

Potatoes, both early and late, have been seriously injured by the heat and drouth. Unless general soaking rains come soon the crop will be nearly a failure. Gardens and pastures have also suffered.

The main honey flow is past and an excellent crop has been secured. The flow from sweet clover continues.

Bulletin No. 14, July 11, 1922—

Rainfall the past week exceeded one inch except in some west-central counties. In large areas the rainfall was between three and four inches, and in a few localities exceeded four inches. The drouth was effectually broken, yet more rain will soon be needed in the west-central counties where soil moisture is greatly deficient. For the State as a whole, June, 1922, was the driest June on record.

Some local damage resulted from excessive rains, windsqualls and hailstorms. In portions of Boone and Story counties hail, July 5, caused total destruction of crops over considerable areas, amounting to hundreds of thousands of dollars. Small grains were beaten down by the rain over large areas. Temperatures and sunshine were noticeably deficient.

Corn was greatly benefited by the rains and made good progress. The earliest fields are beginning to show tassels in nearly all portions of the State. About 85 per cent of the crop has been laid by. Reports from hundreds of correspondents on July 1st showed the condition of the crop to be about the 10-year average, and considerable improvement has occurred since that time.

Oats, July 1, showed the lowest percentage condition since 1911. The cool, rainy weather of the past week will materially aid the filling of late oats but came too late for early oats which are already being harvested. Though the straw is short the grains are of good quality.

Winter wheat harvest made rapid progress. More than half of the crop is in shock. Good to excellent yield and quality are indicated. Spring wheat has been seriously damaged in the large producing west-central counties. The condition July 1 was the lowest since 1894. Poor results in recent years have diminished the acreage so that this crop is now of relatively little importance. Barley harvest is in progress. The condition of this crop is the poorest since 1911.

Late potatoes were greatly improved by the recent cool, cloudy and rainy weather, but early potatoes were too far along to be helped. Cabbage, onions and garden truck were also benefited.

Hay making was greatly impeded by the rain. Considerable hay was damaged in the making. The second cutting of alfalfa is in progress in the west-central, alfalfa section, where the frequency and intensity of rainfall has not greatly interfered.

Bulletin No. 15, July 18, 1922—

Copious to excessive rains occurred this week in all but the extreme northern and western counties. The rain was attended by strong wind and hail in many localities. The principal damage so far reported is in Black Hawk, Boone, Cerro Gordo, Fayette, Greene, Polk, Story and Wright counties. Temperature and sunshine were again deficient.

Harvesting and thrashing were delayed in the storm area. Unharvested small grain, mostly oats, were beaten down by wind and rain over large areas. Thrashing of winter wheat, barley and early oats, which was well under way in the southern third of the State, was interrupted by the rains. Shocked grain was saturated and in some cases had started to heat, germinate and rot. The dry, sunny weather that is following will help to dry the grain much of which will have to be spread out for this purpose. Early thrashing returns show a yield of winter wheat slightly above the average and quality excellent. The recent cool, moist weather has beneficially prolonged the ripening of late oats. Early oats that have been thrashed yielded a little better than was expected, though considerably below the average. The quality is better than last year. Much hay has been damaged in the making.

Corn has made good growth. Tasseling is becoming general and ears are appearing in the earliest fields. In general the crop is about a week or ten days later than last year.

The Secretary of the State Horticultureal Society reports the condition of fruits and vegetables on July 15 as follows: "Summer apples, 80; fall apples, 79; winter apples, 70; pears, 63; plums, 73; grapes, 95; red raspberries, 76; black raspberries, 80; blackberries, 70; gooseberries, 86; currants, 86; peaches, 83; early potatoes, 71; late potatoes, 80; early cabbage, 86; late cabbage, 87; onions, 84; sweet corn, 90; tomatoes, 89; watermelons, 80; cucumbers, 80; sweet potatoes, 86 per cent."

Bulletin No. 16, July 25, 1922—

Light to moderate showers with temperature and sunshine slightly below normal were generally favorable for crops and not seriously detrimental to harvesting and thrashing. Hail storms of the 16th, mentioned last week, though wreaking total destruction of crops in areas as large as 25 farms, were not of great importance as compared with the total crops of the State. The accompanying wind and rain over large areas and also windstorms of the 22d in the western part of the State damaged the overloaded fruit trees, blew off much fruit, flattened the uncut grain and damaged the shock grain. Corn, though blown over badly, will mostly recover.

Corn made satisfactory progress, It varies greatly in stage of development, some fields showing large ears and abundant silk and others not yet showing tassels. In general the crop it at least a week later in development than last year and is silking and tasseling on shorter stalks but this is probably not a disadvantage.

Harvesting is practically completed excepting in the northern third of the State. The cool, moist weather of July has greatly improved late oats. Thrashing has been considerably delayed by wet shocks and slightly delayed in localities by coal shortage resulting from the miners' strike. Early thrashing returns show unusual variability in yields. In general winter wheat yield has been very satisfactory and oats has turned out better than expected from the exceedingly short straw. The usual large movement of grain from the machine to market has been delayed by car shortage resulting from the railroad strike.

Most of the timothy seed crop was headed or otherwise harvested during the last week. The indications are that the total crop will be somewhat less than last year. Second cutting of alfalfa is in progress.

Though many apples, plums, pears and peaches have been blown from the trees by recent windstorms, there is still an abundance of fruit. Early apples and windfalls are being fed to hogs. The berry crop is good and there is an excellent prospect for grapes. Watermelons and muskmelons are promising.

Bulletin No. 17, August 1, 1922—

Generous rains occurred throughout the State, particularly in the western portion where moisture has been seriously deficient. The temperature which has been deficient most of July, rose toward the close of the week and several stations reported their only 90 temperatures of the month on the last day. Destructive winds are reported over relatively small areas and a tornado in Floyd county near Colwell.

Shocked grain was saturated by the heavy rains. The quality of oats was considerably reduced by molding, sprouting and rotting. Thrashing has been greatly delayed by the wet weather and slightly by coal shortage. Considerable of the thrashed oats are not dry enough to keep in bins, partly because of the wet weather and partly because they were cut too green. A beginning has been made in thrashing in all but some of the extreme northern counties and several localities report this work one-fourth done. Yields of oats are generally better than expected and the quality would have been very good but for the rain damage. Winter wheat yields are slightly above the average. Considerable is going from machine to market at $1.00 per bushel.

Abundant moisture and greater warmth pushed corn ahead at a normal rate. Practically all is tasseled, much is silked and large ears are seen in the earliest fields in all portions of the State. The outlook for this crop is promising.

Potatoes were greatly favored by the cool, moist July and the outlook for this crop is better than for several years, at this time of the year. The acreage is, however, rather small, due to repeated failures in recent years. Cabbage, onions, tomatoes, melons and other truck crops have made good progress. Apples are unusually abundant and where sprayed the crop is of excellent quality. Peaches, pears and plums are in excellent condition.

Recent rains have started honey producing plants to blooming freely and a very good late flow of honey is indicated. Buckwheat looks good.

Pastures, second growth clover and third growth alfalfa are making unusual progress for the time of year. Some alsike and medium red clover seed from first cutting has been thrashed and the yields are reported good. Timothy seed thrashing, though delayed by wet weather, has made good progress and the yields are satisfactory.

Bulletin No. 18, August 8, 1922—

Little or no rain over most of the State, seasonable temperature and normal sunshine were favorable conditions for finishing the harvest in the northern counties and for drying the shocked grain; and with ample soil moisture from previous rains corn made very good progress.

Thrashing was nearly suspended till after the middle of the week. The wet bundles could scarcely be fed through the machines and the thrashed grain heated in the bins. Strong northerly winds with low humidity set in Sunday night, drying the grain rapidly so that shocked thrashing and stacking are making rapid progress. For the State as a whole not more than one-fourth of the thrashing has been done. Yields of oats, especially late oats, are turning out better than expected and in general will probably be up to or slightly above the 10-year average and considerably better than last year.

Corn made good progress. Roasting ears are reported in the earliest fields in the southern counties and the milk stage in the northwest. In general the crop is about 10 days later than last year, but with normal weather a good crop is indicated.

Abundant soil moisture has made plowing easy and a good beginning has been made in some localities. A large acreage of fall wheat will be seeded in Taylor county.

Truck crops, potatoes and pastures are in good to excellent condition. Considerable commercial cabbage has been shipped from Mitchell county and onions are maturing gradually and will be a good crop. Tomatoes have set a good crop and are ripening rapidly. Late potatoes are more promising than for several years. The peach crop will be the largest for several years. Apples are so abundant that there is no market for them and they are rotting or being fed to hogs. Early grapes are beginning to turn, and a heavy crop is indicated.

Bulletin No. 19, August 15, 1922—

Rainfall of the week was normal or above in the south-central, central and north-central districts and portions of the southwest and west-central districts, but deficient elsewhere. Temperatures were abnormally low at the beginning of the week but became higher toward the close and reached 90 degrees or higher at many stations on Monday, 13th. Sunshine was deficient in the northeast and above normal in the southwest portion of the

State. Hail occurred over large areas on the 9th and caused complete destruction of crops in unusually large areas in Audubon, Cass, Crawford, Dickinson and Shelby counties.

Corn made fair progress, but needs higher temperature in all portions of the State during the next three weeks to bring it through ahead of frost. Recent favorable conditions in the west-central and northwest districts caused the corn there to catch up to the rest of the State but everywhere the corn is 10 days to two weeks later than last year. The earliest fields are just beginning to dent; the bulk of the crop has scarcely reached the roasting ear stage; much is yet in the milk; and the latest is just tasseling. There are no complaints of barren stalks as was the case last year. With favorable weather a large crop will be matured. Rain is needed in some northeast and southeast counties for the best development of the crop.

Thrashing, though delayed by wet weather, is about 75 per cent completed. The coal shortage has caused more than the usual amount of stacking in some sections. Yield reports continue good to execellent, except that oats in the west-central and northwest districts are about half a crop. Flax harvest began on the 10th. Considerable timothy is standing in the shocks unthrashed.

A good second crop of red clover and a third crop of alfalfa is ready to harvest and this work has already begun in Scott county. Clover is reported full of seed, but needs warm, dry weather to ripen the seed. Considerable mildew is reported on clover.

Fall plowing has made good progress in many sections, but is much harder to do than would ordinarily be expected from the amount of rain that has fallen. The soil is turning up cloddy. Increased fall wheat acreage is indicated in several counties.

Melons, sweet corn, tomatoes and onions are yielding well. The commercial canning season is at its height. Considerable shipments of onions have been made from the large onion producing sections in Mitchell and Harrison counties. Potatoes, though yielding better than usual in gardens and on ordinary farms, are below normal in the Mitchell county commercial producing region.

Bulletin No. 20, August 22, 1922—

The warmest week of the season with ample to copious rains over most of the State and sunshine above normal made an unusual meteorological medley beneficial to corn, pastures and most other crops, while potatoes are not believed to have been injured by the heat. Most of the rain fell Monday morning, the 21st. Temperatures were high in the 90's on several afternoons.

Soil moisture is now generally sufficient to mature the corn crop, but two weeks of hot weather are needed. The earliest corn is past the roasting ear stage and some is nearly ready for the silo, but much is yet in the milk.

Shock thrashing is about finished in most sections of the State. Yields are usually variable but will average good, except oats in the west-central and northwest portions of the State.

Third cutting of alfalfa and second cutting of medium red clover was pushed rapidly. The heat and sunshine of the early part of the week cured the crop nicely. Late reports from timothy thrashing indicate good yields. Second clover crop blossoms are full of seed and a good seed crop is indicated. Some first clover thrashed for seed has yielded well.

Recent rains have aided plowing. Further reports of increased acreage to be seeded to fall wheat have been received.

The Secretary of the State Horticultural Society reports the condition of fruits August 15 as follows: Summer apples, 80; fall apples, 77; winter apples, 70; pears, 69; grapes, 98; red raspberries, 76; black raspberries, 87; blackberries, 87; peaches, 82; plums, 62; early potatoes, 73; late potatoes, 85; early cabbage, 80; late cabbage, 90; onions, 82; sweet corn, 95; tomatoes, 93; cucumbers, 85; watermelons, 83; and sweet potatoes, 85 per cent of a full crop.

Bulletin No. 21, August 29, 1922—

Hot weather at the beginning of the week culminated in the highest temperature of the season on the 24th, followed by a fall of about 40 degrees in 12 hours and cool thereafter. Heavy rains fell in Polk county and in adjacent west-central, central and south-central counties. Elsewhere the rain was mostly light to moderate. More rain is needed in the east-central and northeast counties.

Corn made excellent progress till the cool weather came. Much of it is dented and a little in the northern part of the State is considered safe from frost. Cutting for fodder and silo will begin soon in the north-central counties. More hot weather is needed but more rain would probably be a disadvantage. The general condition of the crop is good. Reports from a special list of correspondents show that the average date of planting was May 12, the same as last year, and that the average date when 75 per cent was silked was July 27, 75 days after planting and 10 days later than last year. The loss of 10 days was due to the cool period extending from the first of July to the middle of August, when the temperature averaged about two degrees per day below normal. No harm will result if temperatures are normal or higher during the next three weeks.

Thrashing of small grain has been completed in many localities and is nearly completed everywhere. Shipments of grain are slow, owing to poor transportation. Roads are mostly good. Clover seed hulling and timothy seed thrashing are in progress with mostly good reports. Considerable second crop clover remains to be cut and reports on seed prospects from second crop clover are rather conflicting.

Late potatoes, truck and pastures are generally good, though more rain is rather seriously needed in the east and southeast counties. Onion and potato harvest is progressing well in Mitchell county and cabbage is being shipped when refrigerator cars can be obtained. Apples are over-abundant with practically no market. Other fruits are plentiful.

Commercial sweet corn and tomato canning made good progress. These crops have yielded well.

Plowing was interrupted by the hot weather and by heavy rains over the sections where these fell, but has now been resumed except in the east and northeast counties, where the soil is too dry.

Bees are storing a large amount of honey of excellent quality from fall flowers and Hubam sweet clover and building up strength to withstand the winter.

Bulletin No. 22, September 5, 1922—

The past week was next to the warmest of the season. Rainfall ranging from practically none in the north and east to excessive local downpours in the southwest portions.

Corn made very good progress. Considerable of the earliest is safe from frost, particularly in the northern counties, and only a little of the latest has not dented. Seed corn can now be gathered. Silo filling and fodder cutting is due to begin any time, though as yet none has been reported. The general condition of the crop is good, though the yield has been somewhat reduced by drouth in the northern and eastern counties.

Where rain has been sufficient, fall plowing and preparation for seeding winter wheat and rye has made good progress. The favorable conditions in the usual winter wheat raising sections of the State, together with more favorable yield and price of that crop compared with oats, will result in a considerable increase in acreage seeded to winter wheat. Seeding will be delayed to avoid the Hessian fly. Over the western half of the State soil and weather conditions have been favorable for fall seeding of alfalfa which will augment the steady increase in acreage of this valuable crop. Three cuttings of alfalfa have been made in most sections this season and a fourth is in prospect in some localities.

Sugar beet yield has been shortened considerably by drouth in some localities, but the quality of the beets for sugar making purposes is reported as good. Sorghum cutting and grinding is now in progress.

The dry, hot weather in the northern counties has been unfavorable for late potatoes. Such commercial potatoes as are raised in Iowa come mostly from these counties. Onion harvest is well advanced in Mitchell and Harrison counties. Cabbage cutting has been suspended in Mitchell county on account of scarcity of suitable cars in which to ship.

Bulletin No. 23, September 12, 1922—

September 4th to 8th, inclusive, was the hottest five-day period of the season. Many stations reported maximum temperatures around the 100 mark on the 6th and several established new high records for September. The temperature fell decidedly on the 9th and 10th. Light frosts were reported in the northwest on the 10th and at several places in nearly all districts of the morning of the 11th with temperatures in the 30's, the lowest reported being 31 at Washta. There was no material damage except to tender garden truck. Rains following the heated term were generous except in the northwest and north central districts.

Reports from hundreds of monthly correspondents on September 1 showed that with normal weather, 68 per cent of the corn would be safe from frost by September 20; 81 per cent by September 30; and if frost held off till October 15, 93 per cent would be safe and until October 31, 98 per cent. The recent hot, dry weather has hastened maturity so that more than 70 per cent is already safe, but it is believed that the crop has been shortened somewhat by this premature ripening, particularly in the northern and eastern counties where the drouth has been acute for several weeks. Some of the latest corn has not dented yet. Fodder cutting and silo filling is being pushed vigorously. It is probable that more of the crop will be handled this way than last year, since it is standing up well generally.

Truck crops, pastures and plowing were greatly benefited by the rains, but more rain is needed in the northwest and north central counties. Shipping of potatoes, onions and cabbage is brisk in Mitchell county.

Canning factories are bringing the season's work to a close, though some are still running a full force on sweet corn and will soon begin on pumpkins. The pack of sweet corn is larger than last year, but only about half that of 1920.

The fourth crop of alfalfa was also benefited by the rains. The honey flow from fall flowers was shortened in the drouthy districts.

Over most of the winter wheat counties, soil conditions have been favorable for plowing and preparation of seed bed, but the actual work of seeding is awaiting a date safe from Hessian fly, which is more numerous than for many years.

Bulletin No. 24, September 19, 1922—

Rains of the week were generous and well distributed over a wide belt extending from southwest to northeast across the State, but generally deficient elsewhere. Temperature and sunshine were deficient.

Corn made rather slow progress as a result of the cool weather, though this will probably be an advantage if frost holds off long enough, for it offset to some extent the premature ripening of previous hot weeks. Probably 85 per cent of the crop is now safe from moderate frost, though not from a severe freeze. During the last 10 years only 82 per cent of the crop on the average has escaped frost damage, but this 10-year period includes the three unusually bad years, 1912, 1915 and 1917. Slight damage occurred on lowlands from frost on the 11th. The rapid drying of the crop during the first part of September hastened silo filling and fodder cutting. In some localities the work has been completed. There are a few reports that "hogging down" has begun.

Potato digging is well under way in some localities, with good reports as to yield and quality. The yield will be about double that of last year. Late truck crops and pastures were improved by the rains. Tomatoes and melons are in good condition, although slightly nipped by frost on lowlands in some localities on the 11th.

Preparations for winter wheat seeding have continued in the usual winter wheat section of the State and extended northward more than usual, though the acreage in the northern half of the State will of course be relatively small. Seeding has begun in Lee and Woodbury counties, but is being generally delayed to avoid the Hessian fly. It is probable that the fly-free date will be announced by the State Entomologist at Ames, after which the winter wheat will be seeded with a rush.

The Secretary of the State Horticultural Society reports the condition of fruits and vegetables, on September 15, as follows: Fall apples, 85; winter apples, 70; pears, 69; plums, 75; grapes, 95; peaches, 80; late potaoes, 75; late cabbage, 81; onions, 84; tomatoes, 92; watermelons, 86; cucumbers, 78; sweet potatoes, 77 per cent of a full crop.

Bulletin No. 25, September 26, 1922—

Warm days, cool nights and almost rainless weather were favorable for maturing corn, digging potaoes, fall plowing, winter wheat seeding and other farm work.

Corn is about up to the normal stage of advancement though a few late planted fields are still green. Less than 10 per cent would now be damaged by a moderately heavy frost. Considerable fodder cutting and silo filling was done the past week and a little cribbing has been done from the earliest fields. Light frost in some localities of the northwestern portion of the State on the morning of the 25th did no appreciable damage.

Winter wheat seeding is under way in a good many counties though there is still danger that wheat seeded now may come up in time to catch a liberal deposit of Hessian fly eggs. During the warm afternoons recently the State Entomologist reported a large increase in eggs deposited. In Warren county 13 eggs per wheat plant were deposited on the 23d. A few early seeded winter wheat fields in Lucas and Wayne counties are already up and 3 inches high. There are reports of winter wheat seeding extending northward into new territory in central Iowa.

Buckwheat is being harvested and the crop is reported as good in the northeastern part of the State, to which this crop is mostly confined. Sugar beet harvest is about to begin in Wright county, where the quality of the beets is reported as good.

Fall apple picking is in progress. The crop is excellent in quantity and quality where spraying was attended to properly. Grape harvest is about finished; the crop was abundant.

Potatoes and onions by the trainload in Mitchell county are being held in warehouses on account of shortage of cars in which to ship.

As a whole the season has been favorable for nearly all crops and in this respect Iowa has been more favored than surrounding states. For this reason prices should be more satisfactory this year than last year provided products are not rushed to market too fast.

CROP SEASON WEATHER, 1922, BY WEEKS.

Average rainfall, mean temperature and mean sunshine with departures from the normal, as derived from the records of selected stations.

Week ending	Rainfall (inches)		Temperature (Deg. Fahr.)		Sunshine	
	State average	Departure	Mean	Departure	Per cent	Departure
April 4	0.7	+0.2	41	— 1	27	—32
April 11	2.0	+1.4	54	+ 7	34	—25
April 18	0.5	—0.3	47	— 2	49	—10
April 25	0.1	—0.6	51	— 2	68	+ 6
May 2	0.1	—0.7	52	— 2	55	+ 6
May 9	0.8	—0.2	65	+ 7	69	+ 7
May 16	0.3	—0.6	65	+ 5	71	+ 9
May 23	0.9	0	62	— 1	60	— 4
May 30	1.4	+0.3	67	+ 2	44	—20
June 6	0.5	—0.8	64	— 3	63	— 3
June 13	0.7	—0.4	76	+ 7	81	+14
June 20	0.2	—0.9	75	+ 4	71	+ 3
June 27	0.3	—0.8	74	+ 2	80	+10
July 4	0.5	—0.5	72	— 2	68	— 4
July 11	2.3	+1.4	71	— 4	58	—14
July 18	1.8	+1.0	73	— 3	68	— 6
July 25	0.4	—0.4	74	— 2	68	— 5
August 1	1.6	+0.8	74	— 1	60	—13
August 8	0.3	—0.5	75	0	73	+ 1
August 15	0.4	—0.4	73	— 1	71	0
August 22	1.1	+0.3	79	+ 6	81	+11
August 29	0.7	0	73	+ 2	69	+ 1
September 5	0.2	—0.4	76	+ 8	67	— 4
September 12	1.4	+0.6	74	+ 7	73	+ 8
September 19	0.7	—0.1	63	— 2	58	— 6
September 26	†	—0.7	62	0	71	+ 9
October 3	0.1	—0.5	68	+ 8	82	+21
For the season	20.0	—2.8	67	+ 1	64	— 2

†Not more than .05 inch.

MONTHLY PERCENTAGE CONDITION OF CROPS, 1922, AND YIELD PER ACRE.

Crops	April 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Yield per acre
Corn	--------	--------	92	91	94	94	96	45.0 bu.
Oats	--------	--------	86	75	84	90	--------	37.0 bu.
Winter wheat	92	95	91	91	--------	--------	--------	23.0 bu.
Spring wheat	--------	--------	86	79	81	--------	--------	15.0 bu.
Barley	--------	--------	92	82	87	91	--------	28.4 bu.
Rye	93	97	95	93	--------	--------	--------	19.0 bu.
Flax	--------	--------	--------	84	87	90	90	10.0 bu.
Potatoes	--------	--------	92	79	84	85	86	106.0 bu.
Tame hay	--------	93	87	85	87	--------	--------	1.40 tons
Wild hay	--------	93	87	85	87	--------	--------	1.14 tons
Alfalfa	--------	--------	98	92	93	--------	--------	2.67 tons
Pastures	--------	87	91	83	90	91	86	

FINAL ESTIMATES OF IOWA CROPS, 1922

(Dated December 1, 1922)

An increase of 57 per cent in the total value of Iowa's 1922 crops over 1921 is shown by the final joint estimates of the U. S. Bureau of Agricultural Economics and the Iowa Weather and Crop Service.

Four bumper corn crops in succession is Iowa's unprecedented record. The 1922 crop of 455,535,000 bushels was raised on 10,123,000 acres with the average yield of 45 bushels to the acre, worth, December 1, fifty-four cents per bushel, or a total value of $245,989,000.

The total crop of 1922 is exceeded only by that of 1920. The old corn on hand November 1, 39,668,000 bushels (latest revision) plus the 1922 crop makes the total corn on farms 495,203,000 bushels compared with 502,344,000 in 1921 and 506,943,000 in 1920. New corn is 28 per cent above prewar normal; old corn 159 per cent above; and total corn 33 per cent above prewar normal. Fortunately, Iowa farmers are much better provided with live stock to consume this corn than they were last year and the corn production for the country as a whole is less.

The quality of the 1922 corn crop is good, the moisture content of that received at elevators during the last week of November was 16.8 per cent as compared with 16.0 per cent last year. Ninety-seven per cent matured without frost damage. On December 1, 86 per cent of the corn husking had been done which is about the usual. About 8 per cent of the crop was hogged and grazed down.

Oats were a much better crop than last year, yielding a total of 222,851,000 bushels on 6,023,000 acres with an average yield of 37 bushels per acre, worth 34 cents per bushel or a total value of $75,769,000.

Spring wheat dropped to 68,000 acres which is probably the least since Iowa became a State. The yield per acre was 15 bushels; total crop 1,020,000 bushels; worth at 95 cents per bushel, $969,000.

Winter wheat is steadily gaining favor in Iowa. The acreage in 1922 increased to 689,000; the yield per acre was 23 bushels; the total yield, 15,847,000 bushels; the price 97 cents per bushel and the total value, $15,372,000. Winter killing was only 2 per cent in the winter of 1921-22. A further increase in acreage seeded is reported for the 1923 crop but there are indications that this will be somewhat reduced by the depredations of the Hessian fly.

Barley acreage is estimated at 150,000; yield per acre, 28.4 bushels; total, 4,260,000 bushels, worth, at 52 cents per bushel, $2,215,000.

Rye acreage was 60,000; yield per acre, 19 bushels; total yield 1,140,000 bushels; price 71 cents per bushel; value $809,000.

Flaxseed:—Area harvested 8,000 acres; average yield, 10 bushels; total yield, 80,000 bushels; price per bushel, $2.07; total value, $166,000.

Timothy seed:—Area harvested, 230,000 acres; average yield 4.53 bushels; total yield, 1,042,000 bushels; average price, $2.49; total value, $2,595,000.

Clover seed:—Area harvested, 132,000 acres; yield per acre, 1.7 bushels; total yield, 224,000 bushels; price per bushel, $10.40; total value, $2,330,000.

Tame hay increased to 3,393,000 acres, including 200,000 acres of alfalfa. The average yield was 1.40 tons; total production, 4,750,000 tons; price $10.40 per ton; total value, $49,400,000.

Alfalfa yielded 2.67 tons per acre or a total of 534,000 tons; price $14.80 per ton; total value $7,903,000.

Wild Hay:—Area, 432,000 acres; yield per acre, 1.14 tons; total production, 492,000 tons; price $8.50 per ton; total value $4,182,000.

Minor miscellaneous crops such as garden truck, fruit, pop corn, sweet corn, buckwheat, sugar beets, pasturage, etc. are lumped off at a paltry $75,101,000 worth.

Increased values due to feeding a considerable portion of these crops to live stock are not considered in this report.

Details by counties are shown on the following pages.

FARM WAGES IN 1922

The wages of male farm labor in Iowa during 1922 were as follows: Average rate per month when hired by the year with board, $37.00, compared with $39.55 last year; without board, $48.00, compared with $52.40 last year. Average wage per day for day labor for harvest work with board, $2.70, compared with $2.76 last year; without board, $3.50, compared with $3.57 last year. Average wage per day for day labor for other than harvest work with board, $2.13, compared with $2.25 last year; without board, $2.58, compared with $2.72 last year. See table on page 16.

FUEL ON IOWA FARMS IN 1922

The average number of cords of fire wood burned per farm reporting for 1922 is estimated at 7.5 cords, compared with 9 cords last year.

The average price per cord, 4-ft. length, for 1922 is estimated at $5.20, compared with $5.14 last year. The average number of tons of coal burned per farm reporting this year was 6.6 tons and the average price estimated at $10.25 per ton. See pages 17 to 19.

IOWA FARM PRICES, DECEMBER 1, 1922

The prices of Iowa farm crops are steadily climbing. A dollar's worth of crops in Iowa November, 1913—before the war—would have sold for 72 cents a year ago in November; for 78 cents in October of this year, and for 83 cents in November of this year. A dollar's worth of crops December 1913 would sell for more than 99 cents today, practically at par again.

The reason for this sudden change in purchasing power is due to several factors. One of which is the demand for feed by an increased number of live stock on feed, 50 per cent more cattle in Iowa and 20 per cent more sheep in the United States. Another is the fact that the normal tendency of crop prices is slightly downward during the fall months. Car shortage in some sections acting as a break on crop movements tends to keep corn prices up.

With live stock—cattle, hogs, sheep, poultry, horses and dairy cows—a dollar's worth in November, 1913, would sell for 97 cents in November, 1922.

With live stock products, milk, butter, eggs, and wool a dollar's worth in November 1913 would sell for $1.46 November 1922.

Wholesale prices of what the farmer has to buy are still 50 per cent or more higher than in 1913 for the United States. A dollar's worth of clothing in 1913 would cost $1.88 this fall, building materials $1.83, house furnishings goods $1.76. C. F. S.

WINTER WHEAT AND RYE OUTLOOK IN IOWA, 1923.

The acreage of winter wheat sown in Iowa this fall, as reported by the Division of Crop and Live Stock Estimates of the United States Department of Agriculture, in co-operation with the Iowa Weather and Crop Service, is 773,000 acres, compared with 689,000 acres harvested during 1922. The condition December 1 was 91 per cent of the normal. Considerable loss from Hessian fly is indicated.

The acreage sown to rye in Iowa this fall is estimated at 59,000 acres, compared with 60,000 acres harvested this year. The growing condition December 1 was 94 per cent of normal.

County estimates of acreage seeded to winter wheat and rye for the 1923 crop and the condition in per cent of normal is shown on page 20.

TABULATED CROP SUMMARY, 1922
IOWA

Crop	Acres	Average yield	Total yield	Average price	Gross value per acre	Total value
Corn	10,123,000	45.00 bus.	455,535,000	$ 0.54	$ 24.30	$245,989,000
Oats	6,023,000	37.00 bus.	222,851,000	0.34	12.58	75,769,000
Spring wheat	68,000	15.00 bus.	1,020,000	0.95	14.25	969,000
Winter wheat	689,000	23.00 bus.	15,847,000	0.97	22.31	15,372,000
Barley	150,000	28.40 bus.	4,260,000	0.52	14.77	2,215,000
Rye	60,000	19.00 bus.	1,140,000	0.71	13.49	809,000
Flax seed	8,000	10.00 bus.	80,000	2.07	20.70	166,000
Timothy seed	230,000	4.53 bus.	1,042,000	2.49	11.28	2,595,000
Clover seed	132,000	1.70 bus.	224,000	10.40	17.65	2,330,000
Potatoes	[a]94,000	90.00 bus.	8,460,000	0.62	55.80	5,245,000
Hay (tame)	3,393,000	1.40 tons	4,750,000	10.40	14.56	49,400,000
Hay (wild)	432,000	1.14 tons	492,000	8.50	9.68	4,182,000
Alfalfa	200,000	2.67 tons	534,000	14.80	39,52	[b]7,903,000
Pasture and grazing	10,130,000	-------------	-----------	5.58	--------	56,525,000
Ensilage	304,000	8.00 tons	2,432,000	3.40	27.20	[c]8,269,000
Sweet corn (com'l crop)	30,000	3.00 tons	90,000	7.00	21.00	630,000
Pop corn	5,500	2,200.00 lbs.	12,100,000	0.03	66.00	363,000
Buckwheat (estimated)	5,000	14.00 bus.	70,000	1.19	16.66	83,000
Fruit crop (estimated)	-----------	-------------	-----------	--------	--------	10,000,000
Garden truck (estimated)	-----------	-------------	-----------	--------	--------	5,000,000
Miscellaneous (estimated)	-----------	-------------	-----------	--------	--------	2,500,000
Total value, not including live stock products, for the year, 1922						$480,142,000
1921						305,459,429
1920						560,460,638

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[a] Subject to revision when assessors' figures become available.
[b] Alfalfa included in tame hay and therefore excluded from grand total.
[c] Ensilage, acreage, production and value is included in corn and therefore excluded from grand total.

MISCELLANEOUS TABLE

Corn moisture. Price of buckwheat, sorghum sirup, hogs for market, cattle for market, feeder cattle and wages of farm labor.

Districts	Moisture in corn marketed November 23-30—%	Average Price December 1, 1922					Wages of Male Farm Labor, 1922					
		Buckwheat, per bushel of 48 lbs.	Sorghum sirup, per gallon	Hogs for market, per cwt.	Cattle for market, per cwt.	Cattle, feeder stock, per cwt.	Average rate per month when hired by the year		Average wage per day for day labor for harvest work		Average wage per day for day labor other than harvest work	
							With board	Without board	With board	Without board	With board	Without board
Northwest	16.6	------	$ .86	$ 7.00	$ 8.00	$ 5.70	$37.50	$52.00	$ 2.93	$ 3.56	$ 2.20	$ 2.86
North Central	17.5	$ 1.07	1.07	7.00	8.45	5.90	36.00	50.00	2.57	3.52	2.20	2.70
Northeast	18.0	.98	1.04	7.31	8.44	5.76	37.00	50.00	2.82	3.48	2.19	2.77
West Central	17.0	------	.97	7.15	8.92	6.26	38.00	52.00	2.68	3.35	2.10	2.57
Central	16.9	1.50	1.04	7.22	9.04	6.45	37.00	49.00	2.75	3.50	2.50	2.74
East Central	17.9	.83	1.01	7.30	8.86	6.82	38.00	49.00	3.30	3.54	2.16	2.80
Southwest	14.5	------	1.01	7.26	9.12	6.54	37.70	48.00	2.58	3.21	2.10	2.63
South Central	16.2	1.05	.95	7.40	8.86	6.64	34.00	45.00	2.40	2.92	1.88	2.30
Southeast	16.2	2.08	.88	7.30	8.80	6.50	35.00	44.80	2.49	2.96	1.91	2.35
State	16.8	1.25	.97	7.20	8.52	6.40	36.80	49.70	2.70	3.35	2.11	2.67

IOWA CROPS, 1922, ESTIMATED NUMBER OF ACRES BY COUNTIES

Districts and Counties	Corn	Oats	Winter Wheat	Spring Wheat	Barley	Rye	*Potatoes	Tame Hay (Including Alfalfa)	Wild Hay	Alfalfa	Pasture
Northwest—											
Buena Vista	135,000	91,000	20	50	260	60	970	25,020	5,080	1,320	66,300
Cherokee	130,000	86,000	20	50	330	----------	1,090	27,160	7,070	3,460	75,300
Clay	116,000	89,000	20	90	420	30	520	22,150	9,590	550	72,000
Dickinson	70,000	57,000	20	210	1,300	80	460	14,750	9,260	350	50,000
Emmet	75,000	58,000	----------	20	520	170	390	16,040	5,750	140	51,000
Lyon	131,000	112,000	100	140	1,790	20	2,080	16,740	9,630	4,440	62,000
O'Brien	130,000	98,000	20	210	1,840	----------	1,020	23,030	6,010	1,430	69,000
Osceola	87,000	79,000	10	20	350	60	1,110	14,720	7,180	320	44,200
Palo Alto	110,000	90,000	10	30	200	730	560	18,800	15,400	300	61,000
Plymouth	196,000	116,000	2,360	8,480	6,200	380	1,880	36,800	17,240	15,360	107,500
Pocahontas	134,000	113,000	10	30	150	270	770	20,470	6,390	470	54,200
Sioux	187,000	128,000	880	2,040	4,920	110	2,000	29,490	14,040	10,290	81,000
For District	1,501,000	1,117,000	3,470	11,370	18,280	1,910	12,850	265,170	112,640	38,370	793.500
North Central—											
Butler	107,000	78,000	10	40	440	1,970	1,320	26,720	11,310	20	94,000
Cerro Gordo	105,000	74,000	20	40	980	190	1,760	33,040	9,100	140	86,300
Floyd	86,000	83,000	20	30	490	760	1,700	31,940	4,160	40	75.000
Franklin	113,000	94,000	10	40	660	140	1,720	29,820	6,970	20	82,500
Hancock	108,000	97,000	20	160	850	140	1,300	26,790	12,110	90	75,000
Humboldt	98,000	72,000	20	50	560	30	500	20,410	3,970	410	43,500
Kossuth	199,000	174,000	10	180	900	330	1,590	41,310	26,850	510	116.000
Mitchell	69,000	74,000	70	140	630	40	8,000	31,320	3,250	20	70,500
Winnebago	72,000	56,000	20	320	2,080	80	1,050	16,880	15,890	80	53,000
Worth	60,000	57,000	30	470	1,270	270	1,360	21,710	12,590	10	59,000
Wright	123,000	95,000	10	60	800	60	860	28,890	4,880	90	68,300
For District	1,140,000	951,000	240	1,530	9,660	4,010	21,160	308,830	111,080	1,430	823,100
Northeast—											
Allamakee	45,000	34,000	1,890	730	2,690	680	1,040	56,410	1,250	10	159,000
Black Hawk	102,000	75,000	430	60	1.800	2,460	1,090	31,680	7,260	80	93,000
Bremer	68,000	57,000	50	90	410	630	1,340	21,810	21,310	110	76,000
Buchanan	100,000	77,000	30	60	430	1,230	670	36,050	10,580	50	107,000
Chickasaw	62,000	63,000	50	210	300	170	680	32,610	12,400	10	81,000
Clayton	81,000	71,000	2,500	640	2,940	600	1,880	72,640	980	140	198,000

Delaware	91,000	61,000	80	230	2,200	1,480	820	47,880	5,330	80	114,000
Dubuque	66,000	53,000	550	870	850	250	2,010	67,370	480	70	150,000
Fayette	98,000	75,000	470	390	2,350	380	1,230	59,610	11,040	10	159,000
Howard	55,000	61,000	140	170	1,890	430	880	35,510	18,400	10	91,000
Winneshiek	82,000	76,000	980	1,060	8,630	360	1,270	58,310	5,130	40	151,000
For District	850,000	703,000	7,170	4,510	24,490	8,670	12,910	519,910	94,160	610	1,379,000
West Central—											
Audubon	94,000	46,000	1,570	850	4,800	50	800	30,600	930	2,000	75,000
Calhoun	145,000	108,000	70		50	50	500	20,510	2,390	610	53,000
Carroll	123,000	77,000	740	1,360	1,310	90	1,750	34,200	5,600	700	79,500
Crawford	140,000	77,000	4,420	6,660	3,230	130	1,610	53,740	4,560	9,940	126,000
Greene	140,000	84,000	420	30	110		270	23,220	3,070	220	72,200
Guthrie	112,000	59,000	3,710	400	1,310	110	410	35,310	2,880	510	123,000
Harrison	161,000	47,000	39,060	8,700	2,790	460	1,260	29,500	6,480	21,800	103,000
Ida	102,000	61,000	50	340	1,580	50	740	25,260	1,590	3,360	60,000
Monona	143,000	45,000	41,710	4,140	1,430	110	1,060	23,320	9,210	16,320	99,000
Sac	135,000	86,000	80	120	2,150	20	1,000	28,640	2,910	1,040	71,000
Shelby	129,000	62,000	1,690	1,800	6,560	530	1,040	39,900	2,910	6,200	93,100
Woodbury	195,000	76,000	15,720	2,440	1,210	280	2,000	42,690	8,370	26,390	108,000
For District	1,619,000	828,000	109,240	26,840	26,530	1,880	12,440	386,890	50,900	89,090	1,062,800
Central—											
Boone	130,000	82,000	720	390	460	210	230	23,540	4,110	940	81,600
Dallas	129,000	67,000	28,600	200	490	90	150	25,400	1,450	800	100,800
Grundy	103,000	80,000	120	20	470	20	1,860	25,120	4,560	20	72,000
Hamilton	132,000	97,000	190	170	260	110	500	24,430	3,560	330	67,700
Hardin	121,000	83,000	150	30	400	30	1,080	30,790	4,250	490	81,500
Jasper	146,000	75,000	5,400	870	200	730	450	50,540	390	140	146,600
Marshall	118,000	68,000	1,320	450	200	250	620	40,590	370	90	89,800
Polk	106,000	51,000	25,850	2,170	20	350	710	25,070	650	870	84,700
Poweshiek	112,000	57,000	950	220	330	130	690	42,300	90	100	121,000
Story	140,000	92,000	800	30	80	190	80	30,040	1,890	240	66,000
Tama	131,000	79,000	1,580	1,030	1,070	170	1,390	55,860	1,050	60	141,000
Webster	156,000	124,000	280	470	330	90	750	22,950	7,160	1,150	82,000
For District	1,524,000	955,000	65,960	6,050	4,310	2,370	8,510	396,630	30,530	5,230	1,134,700
East Central—											
Benton	140,000	93,000	1,350	290	3,400	1,310	1,000	51,050	1,360	150	116,200
Cedar	100,000	50,000	3,730	260	4,930	570	670	51,070	120	70	114,000
Clinton	119,000	53,000	4,290	850	4,880	2,340	560	59,530	1,850	230	156,000
Iowa	100,000	40,000	2,260	560	1,580	360	1,160	40,140	340	40	119,700
Jackson	63,000	35,000	2,550	700	530	950	1,060	61,260	770	60	202,000
Johnson	96,000	49,000	2,590	430	430	840	860	49,820	630	520	130,000
Jones	79,000	44,000	200	230	1,290	810	850	51,470	150	70	150,000
Linn	115,000	70,000	690	240	890	1,410	1,050	56,470	2,820	170	139,000

IOWA CROPS, 1922, ESTIMATED NUMBER OF ACRES, BY COUNTIES—Continued

Districts and Counties	Corn	Oats	Winter Wheat	Spring Wheat	Barley	Rye	*Potatoes	Tame Hay (Including Alfalfa)	Wild Hay	Alfalfa	Pasture
Muscatine	75,000	25,000	7,980	430	1,590	4,500	750	26,650	370	450	77,300
Scott	77,000	35,000	19,980	1,500	13,520	2,410	2,680	34,850	1,350	1,450	81,000
For District	964,000	494,000	45,620	5,490	33,040	15,500	10,640	482,310	9,760	3,210	1,285,200
Southwest—											
Adair	97,000	54,000	5,800	190	5,730	240	650	34,680	2,060	180	117,000
Adams	71,000	30,000	11,570	90	940	440	430	21,420	1,880	820	100,600
Cass	108,000	53,000	22,770	580	7,890	520	800	30,720	770	920	106,000
Fremont	139,000	19,000	22,890	310	410	280	520	20,530	2,400	10,430	78,000
Mills	103,000	21,000	27,470	1,130	540	650	680	20,320	3,500	11,020	67,000
Montgomery	86,000	27,000	25,130	770	750	490	440	26,360	550	5,460	76,000
Page	108,000	18,000	33,400	350	720	740	390	33,130	770	6,430	108,000
Pottawattamie	203,000	57,000	30,230	2,640	11,890	870	2,050	50,100	5,520	21,800	138,000
Taylor	92,000	35,000	29,640	80	----------	650	490	27,700	530	1,000	125,500
For District	1,007,000	314,000	208,900	6,140	28,870	4,880	6,450	264,960	17,980	58,060	916,100
South Central—											
Appanoose	41,000	24,000	5,640	210	30	510	210	45,280	880	80	146,300
Clarke	54,000	29,000	6,260	50	130	280	150	25,830	130	30	105,000
Decatur	67,000	30,000	17,430	40	50	950	170	36,720	210	120	147,000
Lucas	48,000	26,000	11,150	40	----------	250	90	32,910	30	110	119,000
Madison	86,000	28,000	25,910	310	1,480	210	420	24,720	1,090	520	140,000
Marion	88,000	39,000	20,190	1,610	320	240	210	35,840	320	340	135,000
Monroe	44,000	17,000	9,320	350	150	580	200	34,340	140	40	130,500
Ringgold	85,000	30,000	3,900	40	110	760	220	36,060	310	60	130,000
Union	64,000	31,000	2,890	10	480	440	550	28,060	960	60	110,000
Warren	85,000	33,000	33,370	720	370	440	390	33,010	470	510	132,800
Wayne	61,000	35,000	5,970	50	30	520	80	42,620	40	120	120,000
For District	723,000	322,000	142,030	3,430	3,150	5,180	2,690	375,390	4,580	1,990	1,415,600
Southeast—											
Davis	54,000	18,000	6,110	100	40	380	450	41,640	10	40	158,100
Des Moines	65,000	29,000	15,920	190	280	1,330	1,200	25,080	----------	280	92,000
Henry	75,000	28,000	3,280	50	20	490	520	31,070	----------	70	104,000
Jefferson	62,000	28,000	7,500	100	70	570	320	38,460	10	60	112,000
Keokuk	95,000	54,000	3,920	840	400	550	640	45,470	50	70	125,000

Lee	56,000	16,000	16,510	220	330	6,310	1,180	36,930	70	730	147,910
Louisa	75,000	18,000	16,560	120	40	3,920	360	22,360	50	60	78,000
Mahaska	106,000	54,000	9,440	680	270	350	470	38,860	160	60	120,000
Van Buren	50,000	22,000	9,720	70	80	880	240	36,440	10	440	153,000
Wapello	55,000	22,000	15,250	70	70	540	420	32,950	---------	150	107,000
Washington	102,000	47,000	2,160	200	70	280	550	43,650	10	50	123,000
For District	795,000	336,000	106,370	2,640	1,670	15,600	6,350	392,910	370	2,010	1,320,000
For State	10,123,000	6,023,000	689,000	68,000	150,000	60,000	94,000	3,393,000	432,000	200,000	10,130,000

*Potato acreage subject to revision when assessors' figures become available.

AVERAGE AND TOTAL YIELDS OF IOWA CROPS, 1922, BY COUNTIES

Districts and Counties	Corn		Oats		Winter Wheat		Spring Wheat		Barley		Rye		*Potatoes		Tame Hay		Wild Hay		Alfalfa	
	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Tons per acre	Total tons	Tons per acre	Total tons	Tons per acre	Total tons
Northwest—																				
Buena Vista	44	5,940,000	40	3,640,000	20	400	18	900	33	9,600	27	1,600	98	95,000	1.3	30,800	1.0	5,100	3.5	4,600
Cherokee	42	5,460,000	33	2,838,000	20	400	14	700	31	10,200	----	----------	98	107,000	1.4	33,200	1.1	7,800	2.6	9,000
Clay	41	4,756,000	36	3,204,000	20	400	17	1,500	27	11,300	18	500	110	57,000	1.3	28,000	1.2	11,500	2.9	15,900
Dickinson	34	2,380,000	31	1,767,000	15	300	12	2,500	28	36,400	15	1,200	79	36,000	1.2	17,300	1.0	9,300	2.2	800
Emmet	34	2,550,000	37	2,146,000	----	----------	14	300	35	18,200	14	2,400	120	47,000	1.4	22,300	1.2	6,900	2.2	300
Lyon	43	5,633,000	35	3,920,000	20	2,000	14	1,900	27	48,300	21	400	135	281,000	1.5	18,400	1.3	12,500	3.0	13,300
O'Brien	40	5,200,000	37	3,626,000	20	400	15	3,200	33	60,700	----	----------	94	96,000	1.3	28,000	1.0	6,000	3.1	4,400
Osceola	40	3,480,000	34	2,686,000	20	200	14	300	27	9,400	20	1,200	124	138,000	1.2	17,300	1.3	9,300	2.9	900
Palo Alto	43	4,730,000	34	3,060,000	20	200	14	400	28	5,600	22	16,100	98	55,000	1.4	25,900	0.9	13,900	3.0	900
Plymouth	42	8,232,000	31	3,596,000	22	52,000	14	120,700	30	186,000	28	10,600	141	265,000	1.3	28,000	1.0	17,200	2.0	30,600
Pocahontas	45	6,030,000	37	4,181,000	20	200	20	600	30	4,500	21	5,700	111	85,000	1.2	24,000	1.2	7,700	3.1	1,500
Sioux	45	8,415,000	35	4,480,000	19	17,000	16	33,600	29	142,700	21	2,300	118	236,000	1.3	25,000	1.1	15,000	2.6	26,800
For District	41	62,806,000	35	39,144,000	20	73,500	14	166,600	30	542,900	22	42,000	116	1,498,000	1.32	298,200	1.09	122,200	2.80	109,000
North Central—																				
Butler	42	4,494,000	38	2,964,000	20	200	17	700	30	13,200	20	39,400	123	162,000	1.7	45,400	1.1	12,400	2.7	50
Cerro Gordo	45	4,725,000	41	3,034,000	18	360	15	600	29	28,400	20	3,800	112	197,000	1.4	46,000	1.1	10,000	3.8	530
Floyd	36	3,096,000	40	3,320,000	21	420	15	400	29	14,200	21	15,900	123	209,000	1.4	44,700	1.2	5,500	2.3	90
Franklin	48	5,424,000	42	3,948,000	10	100	17	700	34	22,400	14	2,000	95	163,000	1.2	35,800	1.6	11,200	4.4	90
Hancock	44	4,752,000	32	3,104,000	17	340	16	3,000	27	23,000	18	2,500	130	169,000	1.5	40,000	0.8	9,700	2.4	220
Humboldt	47	4,606,000	36	2,592,000	17	340	20	1,000	27	15,100	12	400	109	54,000	1.2	24,000	1.0	4,000	3.1	1,300
Kossuth	43	8,557,000	39	6,783,000	16	160	17	3,500	32	28,800	25	8,200	89	142,000	1.4	57,100	0.8	21,500	2.7	1,380
Mitchell	41	2,829,000	41	3,034,000	17	1,190	20	3,000	26	16,400	30	1,200	138	1,104,000	1.4	43,800	1.0	3,200	2.7	50
Winnebago	42	3,024,000	38	2,128,000	17	340	16	5,600	27	56,200	24	1,900	110	115,000	1.2	20,200	1.0	16,000	2.4	190
Worth	42	2,520,000	39	2,223,000	16	480	15	7,500	27	34,300	20	5,400	78	106,000	1.3	28,200	1.3	16,300	3.3	30
Wright	43	5,289,000	40	3,800,000	17	170	20	1,500	32	25,600	17	1,000	81	70,000	1.4	40,300	1.0	4,800	3.1	280
For District	43	49,316,000	39	36,930,000	17	4,100	17	27,500	29	277,600	20	81,700	118	2,491,000	1.39	425,500	1.02	114,600	2.90	4,210

Northeast—																				
Allamakee	55	2,475,000	41	1,394,000	18	34.000	20	15,600	32	86,100	28	19,000	157	163,000	1.9	107,200	1.5	1,900	2.7	30
Black Hawk	47	4,794,000	39	2,925,000	20	8,600	20	1,200	27	50,400	22	54,100	104	113,000	1.7	53,700	1.2	8,700	2.2	180
Bremer	45	3,060,000	44	2,508,000	24	1,200	14	1,300	32	13,100	18	11,300	134	180,000	1.6	34,700	1.2	25,800	4.4	480
Buchanan	45	4,500,000	32	2,464,000	21	700	17	1,000	25	10,800	18	22,100	74	50,000	1.4	50.400	1.2	12,700	3.3	160
Chickasaw	40	2,480,000	42	2,646,000	21	1,000	12	2,500	35	10,500	22	3,700	108	73,000	1.3	42,400	1.2	14,900	2.2	20
Clayton	52	4,212,000	44	3,124,000	26	65,000	18	12,500	32	94,100	25	15,000	169	318,000	1.7	112,300	1.4	1,400	3.7	520
Delaware	40	3,640,000	34	2,074,000	12	1,000	14	3,200	28	61,600	25	37,000	94	77,000	1.3	62,100	1.4	7,500	2.4	190
Dubuque	47	3,102,000	41	2,173,000	20	11,000	20	18,400	28	23,800	20	5,000	126	253,000	1.6	107,700	1.3	600	3.3	230
Fayette	49	4,802,000	39	2,925,000	20	9,400	18	7,500	35	80,000	22	8,400	115	141,000	1.5	89,400	1.1	12,100	3.3	30
Howard	9	2,145,000	40	2,440,000	16	2,200	12	2,000	32	60,500	16	6,900	86	76,000	1.5	53,200	1.5	27,600	5.0	50
Winneshiek	42	3,444,000	41	3,116,000	25	24,500	17	19,000	32	276,200	24	8,600	88	112,000	1.6	93,200	1.1	5,600	4.0	160
For District	46	38,654,000	40	27,789,000	21	158,600	17	84,200	30	767,100	22	173,100	121	1,556,000	1.56	806,300	1.26	118,800	3.30	2,050
West Central—																				
Audubon	43	4.042,000	28	1,288,000	25	39,200	13	12,000	30	144,000	20	1,000	91	73,000	1.4	40,000	1.3	1,200	3.1	6.200
Calhoun	49	7,105,000	38	4,104,000	24	1,700	----	----------	28	1,400	20	1,000	94	47,000	1.3	25,100	1.0	2,400	2.7	1,650
Carroll	45	5,535,000	33	2,541,000	23	17,000	12	17,000	29	38,000	10	900	106	185,000	1.4	46,900	1.3	7,300	2.9	2,000
Crawford	38	5.320,000	28	2,156,000	28	123,800	15	104,000	28	91,700	22	2,900	94	151,000	1.3	56,900	1.3	5,900	2.4	23,900
Greene	50	7,000,000	39	3,276.000	17	7,100	18	500	28	3,100	----	----------	76	20,000	1.2	27,600	0.8	2,500	1.6	350
Guthrie	44	4,928,000	37	2,183,000	23	85,300	12	4,800	29	38,000	19	2,100	105	43,000	1.3	45,200	1.3	3,700	3.8	1,940
Harrison	46	7,406,000	28	1,316,000	22	741,000	14	122,800	23	64,200	19	8,700	100	126,000	1.9	14.600	1.5	9,700	2.6	56,680
Ida	39	3,978,000	32	1,952.000	22	1,100	12	4,100	28	44,200	17	800	92	85,000	1.2	26,300	1.3	2,100	3.5	11,760
Monona	38	5.434,000	28	1,260,000	21	875,900	12	50,700	29	41,500	20	2,200	107	113,000	1.3	9,100	1.0	9,200	2.6	42,430
Sac	48	6,480,000	35	3,010,000	22	1,800	19	2,300	31	66,600	20	400	109	109,000	1.5	41,400	1.2	3,500	3.4	3,540
Shelby	41	5,289,000	29	1,798,000	29	49,000	14	26,000	26	170,600	23	12,200	80	83.000	1.4	47,200	1.4	4,100	3.4	21,100
Woodbury	32	6,240,000	25	1,900,000	27	424,400	12	31,000	28	33,900	17	4,800	108	216,000	1.2	21,200	0.6	5,000	2.5	65,980
For District	43	68.757,000	32	26,784.000	24	2,367,300	14	375,200	28	737,200	20	37,000	101	1,251,000	1.35	401,500	1.11	56,600	2.60	237,530

AVERAGE AND TOTAL YIELD OF IOWA CROPS, 1922, BY COUNTIES—Continued

Districts and Counties	Corn		Oats		Winter Wheat		Spring Wheat		Barley		Rye		Potatoes		Tame Hay		Wild Hay		Alfalfa	
	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	Total bushels	Bushels per acre	*Total bushels	Tons per acre	Total tons	Tons per acre	Total tons	Tons per acre	Total tons
Central—																				
Boone	46	5,980,000	37	3,034,000	21	15,100	18	7,000	29	13,300	19	4,000	81	19,000	1.5	33,900	1.1	4,500	2.8	2,640
Dallas	49	6,321,000	38	2,546,000	24	686,400	18	4,500	31	15,200	20	1,800	120	18,000	1.5	36,900	1.3	1,900	3.0	2,400
Grundy	50	5,150,000	43	3,440,000	22	2,600	21	400	37	17,400	28	600	106	197,000	1.6	40,200	1.3	5,900	3.1	60
Hamilton	52	6,864,000	42	4,074,000	22	4,200	18	3,500	31	8,100	23	2,500	84	42,000	1.2	28,900	1.1	3,900	2.6	860
Hardin	52	6,292,000	46	3,818,000	25	3,800	16	500	39	15,600	20	600	117	126,000	1.4	42,400	1.4	6,000	3.3	1,620
Jasper	50	7,300,000	39	2,925,000	27	145,800	15	14,000	31	6,200	21	15,300	86	39,000	1.5	75,600	1.4	546	2.6	360
Marshall	51	6,018,000	45	3,060,000	23	30,400	20	9,400	39	7,800	16	4,000	94	58,000	1.7	68,800	1.1	400	4.2	380
Polk	47	4,982,000	40	2,040,000	25	646,200	12	27,000	29	600	18	6,300	81	58,000	1.7	41,100	1.4	900	3.0	2,610
Poweshiek	47	5,264,000	39	2,223,000	21	20,000	14	3,700	28	9,200	26	3,400	80	71,000	1.8	76,000	1.3	100	1.9	190
Story	49	6,860,000	42	3,864,000	25	20,000	16	400	26	2,100	20	3,800	84	7,000	1.5	44,700	1.3	2,500	2.7	650
Tama	50	6,550,000	39	3,081,000	31	49,000	16	17,000	31	33,200	18	3,100	97	135,000	1.6	89,300	1.1	1,200	3.8	610
Webster	46	7,176,000	39	4,836,000	23	6,400	17	8,400	29	9,600	15	1,400	81	61,000	1.5	32,700	1.2	8,600	3.3	3,800
For District	49	74,757,000	41	38,941,000	24	1,629,900	17	95,800	32	138,300	20	46,800	98	831,000	1.56	610,500	1.20	36,446	3.08	16,180
East Central—																				
Benton	49	6,860,000	42	3,906,000	23	31,000	19	5,500	27	91,800	20	26,200	102	102,000	2.2	112,000	1.5	2,000	4.4	660
Cedar	51	5,100,000	47	2,350,000	27	100,700	20	5,200	28	138,000	28	16,000	70	47,000	1.9	96,900	1.2	150	3.3	230
Clinton	42	4,998,000	37	1,961,000	23	98,700	15	12,800	24	117,100	18	42,100	96	51,000	1.5	88,900	1.1	2,000	3.0	690
Iowa	45	4,500,000	41	1,640,000	24	54,200	18	10,100	24	38,400	15	5,400	106	123,000	1.7	68,200	1.1	400	2.2	90
Jackson	47	2,961,000	41	1,435,000	16	40,800	13	9,100	26	13,800	16	15,200	113	154,000	1.6	97,900	1.1	800	3.5	210
Johnson	47	4,512,000	42	2,058,000	24	62,200	16	6,900	29	12,500	17	14,300	100	86,000	1.8	88,700	1.1	700	2.3	1,200
Jones	50	3,950,000	39	1,716,000	23	4,600	17	3,900	34	43,900	15	12,200	108	92,000	1.5	77,100	1.1	200	2.4	170
Linn	48	5,520,000	39	2,730,000	23	15,900	18	4,300	30	26,700	20	28,200	95	100,000	1.5	84,400	1.1	3,100	4.6	780
Muscatine	45	3,375,000	40	1,000,000	22	175,600	15	6,400	24	38,200	17	76,500	73	55,000	1.6	41,900	1.1	400	3.5	1,580
Scott	48	3,696,000	41	1,435,000	26	519,500	16	24,000	25	343,400	17	41,000	74	198,000	1.7	56,800	1.2	1,600	3.0	4,350
For District	47	45,472,000	41	20,231,000	23	1,103,200	17	88,200	27	863,800	18	277,100	95	1,011,000	1.70	812,800	1.17	11,350	3.12	9,960

Southwest—																			
Adair	42	4,074,000	35	1,890,000	23	133,400	16	3,000	29	166,200	15	3,600	90	58,000	1.2	41,400	1.7	3,500	2.2	400
Adams	45	3,195,000	34	1,020,000	22	254,500	17	1,500	27	25,400	24	10,600	104	45,000	1.4	28,800	1.2	2,300	3.3	2,710
Cass	46	4,968,000	35	1,855,000	21	478,200	14	8,100	27	213,000	18	9,400	106	85,000	1.4	41,700	1.1	800	3.3	3,040
Fremont	44	6,116,000	28	532,000	23	526,500	16	5,000	26	10,700	22	6,200	88	46,000	1.2	12,100	2.0	4,800	3.0	31,290
Mills	48	4,944,000	31	651,000	20	550,100	12	13,600	26	14,000	16	10,400	85	58,000	1.5	13,900	1.5	5,200	2.8	30,860
Montgomery	43	3,698,000	32	864,000	22	560,400	12	9,200	27	20,200	22	10,800	88	39,000	1.4	29,300	1.3	700	2.4	13,100
Page	48	5,184,000	33	594,000	25	835,000	12	4,200	31	22,300	24	17,800	68	26,000	1.3	34,700	1.1	800	2.3	14,790
Pottawattamie	45	9,135,000	30	1,710,000	22	674,100	16	42,300	27	324,600	20	17,400	76	156,000	1.6	45,300	1.2	6,600	2.0	43,600
Taylor	47	4,324,000	35	1,225,000	24	711,400	14	1,100	----	---------	25	16,200	74	36,000	1.8	48,000	1.3	700	2.7	2,700
For District	45	45,638,000	33	10,341,000	23	4,723,600	14	88,000	27	796,400	21	102,400	86	549,000	1.43	295,200	1.42	25,400	2.45	142,490
South Central—																				
Appanoose	42	1,722,000	28	672,000	15	84,600	14	2,900	28	800	17	8,700	88	18,000	1.4	63,300	1.6	1,400	3.8	300
Clarke	43	2,322,000	36	1,044,000	17	106,400	14	700	29	3,600	12	3,400	125	19,000	1.3	33,500	1.3	200	2.0	60
Decatur	42	2,814,000	29	870,000	19	331.200	12	500	20	1,000	16	15,200	109	18,000	1.4	51,200	1.3	289	3.3	400
Lucas	47	2,256,000	28	728,000	18	200,700	15	600	----	---------	10	500	67	6,000	1.5	49,200	1.1	30	2.2	240
Madison	49	4,214,000	35	980,000	26	673,700	16	5,000	29	42,900	18	3,800	136	57,000	1.2	29,000	1.2	1,300	3.7	1,920
Marion	47	4,136,000	35	1,365,000	25	534,800	14	22,500	25	8,000	19	4,600	88	18,000	1.5	53,200	1.3	400	3.4	1,160
Monroe	45	1,980,000	29	493,000	20	186,400	13	4,600	28	4,200	15	8,700	75	15,000	1.5	51,400	1.3	200	2.2	90
Ringgold	46	3,910,000	33	990,000	24	93,600	14	600	27	3,000	16	12,200	75	16,000	1.4	50,400	1.4	400	2.0	120
Union	47	3,008,000	37	1,147,000	24	69,400	18	200	29	13,900	20	8,800	84	46,000	1.3	36,400	1.4	1,300	2.6	160
Warren	46	3,910,000	36	1,188,000	23	767,500	14	10,100	35	13,000	21	9,200	102	40,000	1.5	48,700	1.1	500	2.9	1,480
Wayne	43	2,623,000	32	1,120,000	18	107,500	10	500	28	800	12	6,200	91	7,000	1.2	51,000	1.1	40	3.0	360
For District	45	32,895,000	33	10,597,000	21	3,125,800	6	48,200	28	91,200	16	81,300	97	260,000	1.39	517,300	1.32	6,059	3.15	6,290
Southeast—																				
Davis	46	2,484,000	29	522,000	22	134,400	8	1,800	28	1,100	14	5,300	93	42.000	1.1	49,900	1.6	16	3.1	120
Des Moines	50	3,250,000	36	1,044,000	28	445,800	18	3,400	35	9,800	21	27,900	78	94,000	1.6	39,700	-----	-------	2.4	670
Henry	49	3,675,000	38	1,064,000	27	88,600	25	1,200	26	500	20	9,800	45	23,000	1.5	46,500	-----	-------	4.4	310
Jefferson	44	2,728,000	30	840.000	20	150,000	20	2,000	26	1,800	19	10,800	77	25,000	1.2	46,000	1.1	11	3.8	230
Keokuk	45	4,275,000	38	2,052,000	26	101,900	15	12,600	21	8,400	19	10,400	75	48,000	1.6	72,600	1.2	60	2.2	150
Lee	46	2,576,000	35	560,000	26	429,300	22	4,800	26	8,600	19	119,900	102	120,000	1.7	61,500	1.2	84	3.6	2,630
Louisa	50	3,750,000	41	738,000	26	430,600	23	2,800	26	1,000	20	78,400	73	26,000	1.6	35,700	2.0	100	2.2	130
Mahaska	48	5.088,000	38	2,052,000	26	245,400	19	12,900	31	8,400	20	7,000	118	55,000	1.5	58,200	1.6	256	3.0	180
Van Buren	44	2,200,000	29	638,000	23	223,600	15	1,000	27	2,200	15	13.200	78	19,000	1.4	50,400	0.8	8	2.9	1,280
Wapello	44	2,420,000	32	704,000	24	366,000	15	1,000	21	1,500	20	10,800	40	17,000	1.2	39,400	-----	-------	3.1	460
Washington	47	4,794,000	40	1,880,000	21	45,400	14	2,800	31	2,200	18	5,000	67	37,000	1.9	82,800	1.0	10	2.7	130
For District	47	37,240,000	35	12,094,000	24	2,661,000	9	46,300	27	45,500	19	298,500	80	506,000	1.49	582,700	1.47	545	3.13	6,290
For State	45	455,535,000	37	222,851,000	23	15,847,000	15	1,020,000	28.4	4,260,000	19	1,140,000	106	9,953,000	1.40	4,750,000	1.13	492,000	2.67	534,000

*Total production of potatoes subject to revision when assessors' figures become available.

AVERAGE PRICE OF FARM PRODUCTS DECEMBER 1, 1922, BY COUNTIES

Districts and Counties	Corn per bushel of 70 lbs. in ear or 56 lbs. shelled	Oats per bushel of 32 pounds	Spring wheat per bushel of 60 pounds	Winter wheat per bushel of 60 pounds	Barley per bushel of 48 pounds	Rye per bushel of 56 pounds	White potatoes (Irish) per bushel of 60 pounds	Tame hay (loose) per ton of 2,000 pounds	Wild hay (loose) per ton of 2,000 pounds	Alfalfa (loose) per ton ton of 2,000 pounds	Timothy seed per bushel of 45 pounds	Clover seed per bushel of 60 pounds	Pop-corn, per pound, shelled	Apples, per bushel of 48 pounds	Cream per pound of butter fat	Butter, per pound	Chickens (live wgt.) per pound	Eggs, per dozen	Honey (per lb.)		
																			Comb in sections	Extracted (less cost of container)	In bulk
Northwest—																					
Buena Vista	$ .55	$ .37	$ 1.02	$ 1.02	$ .70	$ .79	$ .61	$12.00	$11.00	$14.44	$ 3.25	$14.00	$ .03	$ 1.92	$ .43	$ .44	$ .13	$ .40	$ .19	$ .14	$ .15
Cherokee	.53	.33	------	------	.48	------	.60	12.00	12.16	13.00	3.50	12.00	------	2.28	.44	.39	.13	.40	.12	.13	.11
Clay	.50	.32	1.00	------	.48	.60	.63	11.57	9.14	12.00	3.00	------	.06	1.85	.47	.46	.13	.39	.22	.15	.14
Dickinson	.52	.33	.95	1.25	.45	------	.47	13.00	10.00	15.00	------	10.50	.02	1.60	.43	.45	.13	.37	.15	.15	------
Emmet	.52	.32	------	------	.42	------	.50	11.43	7.80	------	2.50	9.33	.02	1.30	.47	.44	.13	.40	.18	.16	------
Lyon	.54	.33	1.00	1.00	.50	------	.37	11.14	9.14	13.57	2.00	13.00	------	1.68	.47	.49	.13	.38	.23	.20	.15
O'Brien	.53	.32	------	------	.44	------	.45	13.87	11.00	18.83	3.25	14.00	.04	1.41	.45	.48	.13	.42	.22	.20	.17
Osceola	.52	.33	------	------	------	------	.43	10.00	8.75	12.50	2.05	11.20	.08	1.87	.48	.47	.13	.39	.17	.19	------
Palo Alto	.52	.31	------	------	------	------	.61	6.25	7.00	------	2.62	11.00	------	1.67	.42	.45	.14	.39	.15	.10	.10
Plymouth	.54	.33	.94	.91	.46	.60	.58	11.14	10.66	13.16	2.37	8.75	------	1.31	.47	.47	.13	.38	.18	.16	.15
Pocahontas	.51	.32	------	------	------	------	.5	12.50	9.00	20.00	2.50	10.33	.04	1.56	.43	.41	.12	.37	.15	------	------
Sioux	.54	.32	.93	.85	.48	------	.42	12.87	10.37	15.78	------	------	.05	1.67	.46	.46	.13	.39	.16	.11	------
For District	$ .53	$ .33	$ .97	$ 1.01	$ .49	$ .66	$ .52	$11.48	$ 9.67	$14.83	$ 2.70	$11.41	$ .04	$ 1.68	$ .45	$ .45	$ .13	$ .39	$ .18	$ .15	$ .14
North Central—																					
Butler	$ .51	$ .34	------	------	------	$ .70	$ .51	$ 8.50	$ 6.50	------	------	------	------	$ 1.53	$ .49	$ .49	$ .13	$ .47	$ .16	$ .15	------
Cerro Gordo	.51	.36	$ 1.00	------	$ .80	------	.54	14.00	10.00	------	$ 3.50	$12.00	------	1 75	.50	.47	.12	.48	.23	.25	$ .20
Floyd	.53	.35	------	------	.55	.85	.39	9.08	5.50	$14.00	2.50	13.00	$ .05	1.50	.44	.46	.14	.44	.17	.18	------
Franklin	.52	.33	.85	.90	.65	.65	.53	10.90	9.67	15.50	2.83	13.00	------	1.25	.43	.44	.14	.44	.25	.23	.20
Hancock	.52	.32	.90	.95	.51	.66	.47	10.75	9.20	15.00	------	12.00	------	1.83	.46	.48	.13	.41	.26	.23	.21
Humboldt	.52	.32	------	------	------	------	.71	11.00	8.12	15.00	------	------	------	1.53	.42	.43	.13	.36	.28	.20	------
Kossuth	.54	.33	1.00	------	------	------	.55	10.95	8.15	15.00	3.00	11.33	.10	1.49	.45	.46	.12	.43	.25	.20	.18
Mitchell	.54	.34	.90	------	.43	------	.31	7.90	4.83	------	3.06	11.17	.05	1.92	.46	.49	.13	.44	.22	.21	.19
Winnebago	.52	.34	.95	------	.47	.58	.39	10.00	6.94	15.00	3.50	------	------	1.31	.49	.47	.13	.44	.30	.15	------
Worth	.48	.33	.86	.80	.49	.63	.42	9.25	7.00	------	3.50	14.00	------	1.48	.49	.56	.13	.42	.25	------	------
Wright	.52	.33	1.01	.90	.54	.65	.5	13.00	10.00	20.00	3.31	9.50	.04	1.61	.43	.46	.13	.40	.20	.17	.18
For District	$ .52	$ .31	$ .93	$ .89	$ .56	$ .67	$ .5	10.48	$ 7.81	$15.64	$ 3.15	$12.00	$ .06	$ 1.58	$ .46	$ .46	$ .14	$ .43	$ .23	$ .20	$ .19

Northeast—																					
Allamakee	$ .52	$ .35	$ 1.01	$ 1.01	$ .49	$ .6	$ .5	$10.37	$ 9.50	------	$ 2.73	$ 9.85	------	$ 1.16	$ .48	$ .49	$ .14	$ .41	$ .24	$ .25	$ .28
Black Hawk	.57	.38	1.08	------	.55	.75	.71	10.00	7.45	$18.00	3.92	10.25	$ .07	1.29	.49	.53	.14	.47	.26	.14	.18
Bremer	.51	.31	.90	.97	.52	.82	.56	9.43	6.78	12.00	3.00	12.20	.06	1.55	.45	.48	.15	.43	.22	.25	.15
Buchanan	.53	.31	.90	.90	.50	.63	.75	9.77	5.43	------	2.25	10.50	.06	1.33	.43	.45	.13	.46	.22	.18	.17
Chickasaw	.51	.33	.90	------	.46	.65	.55	9.33	7.00	------	1.87	8.00	------	1.56	.49	.50	.16	.44	.25	.15	------
Clayton	.54	.36	.98	1.01	.52	.78	.60	11.11	8.00	------	2.40	11.17	.07	1.57	.52	.47	.15	.36	.21	.15	.22
Delaware	.55	.35	------	1.10	.56	.64	.59	9.50	6.30	10.00	2.87	10.00	.03	1.13	.46	.49	.15	.42	.19	.14	.13
Dubuque	.57	.38	.97	.97	.52	.70	.64	14.25	10.50	18.00	2.85	11.25	------	1.04	.48	.48	.15	.35	.12	.11	.10
Fayette	.56	.37	------	------	.50	------	.64	8.25	5.12	------	2.21	8.50	.05	1.00	.48	.49	.14	.43	.27	.17	.12
Howard	.51	.30	.98	1.05	.54	.67	.42	8.50	5.00	------	2.73	10.26	.05	1.75	.43	.40	.14	.39	.22	.18	.07
Winneshiek	.52	.35	.94	1.00	.47	.85	.56	10.50	6.00	------	4.20	12.50	.06	3.00	.46	.48	.15	.37	.35	.30	.25
For District	$ .54	$ .34	$ .96	$ 1.00	$ .51	$ .71	$ .58	$10.09	$ 7.01	$14.50	$ 2.82	$10.41	$ .06	$ 1.49	$ .47	$ .48	$ .14	$ .41	$ .23	$ .18	$ .17
West Central—																					
Audubon	$ .55	$ .32	$ .96	$ 1.02	$ .47	------	$ .80	$ 7.50	$ 6.67	$15.50	$ 2.50	$10.50	$ .06	$ 1.05	$ .42	$ .44	$ .14	$ .37	$ .25	------	------
Calhoun	.55	.34	------	------	------	------	.73	12.00	10.00	15.00	4.00	9.00	------	1.18	.45	.45	.15	.42	.20	$ .15	$ .19
Carroll	.56	.34	1.25	1.05	.46	------	.55	12.80	7.83	19.00	2.50	14.00	------	1.15	.39	.40	.14	.38	.18	.15	------
Crawford	.56	.32	.95	.99	.48	$ .70	.57	12.87	13.20	14.64	3.44	12.40	.05	1.56	.39	.39	.14	.38	.19	.18	.16
Greene	.55	.35	.85	.91	.42	.75	.64	10.00	7.80	15.00	3.38	10.75	.08	1.38	.40	.38	.13	.37	.28	.20	.25
Guthrie	.54	.34	1.01	1.03	.50	.76	.86	8.71	7.00	12.25	2.35	9.83	.04	.96	.41	.44	.12	.37	.25	------	------
Harrison	.54	.31	.96	.98	.40	.80	.42	12.00	10.00	12.71	------	8.00	.04	1.09	.44	.37	.15	.37	.17	.16	.15
Ida	.55	.33	.93	.95	.50	.65	.43	13.50	10.00	19.00	2.00	8.00	.03	1.00	.41	.40	.13	.38	.17	.27	------
Monona	.55	.31	.98	.98	------	.72	.51	9.00	8.50	11.00	------	------	.06	1.00	.48	.40	.13	.40	.18	.13	.10
Sac	.54	.35	.90	.90	.62	------	.58	11.57	10.50	16.00	2.76	13.67	.02	1.19	.40	.44	.13	.37	.19	.17	.18
Shelby	.56	.34	.92	.95	.42	.65	.51	12.90	9.50	16.17	2.75	9.67	------	1.19	.37	.38	.16	.40	.18	.20	------
Woodbury	.55	.32	.97	.98	.55	.65	.52	10.00	8.00	13.00	2.50	9.50	.04	1.70	.42	.41	.15	.34	.13	.15	.10
For District	$ .55	$ .33	$ .97	$ .98	$ .48	$ .74	$ .59	$11.07	$ 9.08	$14.94	$ 2.82	$10.48	$ .05	$ 1.20	$ .42	$ .41	$ .14	$ .38	$ .20	$ .18	$ .16
Central—																					
Boone	$ .55	$ .34	$ .95	$ .95	------	------	$ .71	$12.69	$ 9.64	$20.67	$ 2.45	$11.22	$ .06	$ 1.82	$ .45	$ .44	$ .14	$ .42	$ .24	$ .19	$ .19
Dallas	.54	.34	.91	.97	$ .52	$ .60	.80	10.89	8.10	13.80	2.96	11.00	.05	.94	.43	.42	.15	.40	.22	------	------
Grundy	.52	.34	.95	.97	.52	.60	.45	8.12	6.33	------	1.94	10.29	------	1.21	.44	.45	.14	.42	.23	.25	------
Hamilton	.54	.33	1.00	.99	.53	.71	.72	11.50	10.21	11.67	3.04	12.50	.05	1.29	.46	.39	.13	.44	.22	.20	.19
Hardin	.54	.33	------	1.00	------	------	.69	9.60	8.33	13.75	2.67	11.67	.04	1.24	.46	.44	.14	.43	.20	.16	.18
Jasper	.54	.34	.98	1.01	.60	.77	.70	8.64	7.83	11.00	2.14	9.22	.04	.92	.41	.38	.12	.39	.24	.22	.19
Marshall	.56	.35	1.00	1.00	.45	.70	.62	9.66	8.00	10.00	2.10	12.00	.03	1.20	.40	.42	.16	.40	.28	.25	.18
Polk	.53	.34	.92	.94	------	------	.76	10.28	6.00	13.00	2.81	10.75	.04	.89	.40	.35	.14	.40	.21	.20	.15
Poweshiek	.55	.33	.97	.98	.70	1.00	.79	9.43	7.00	12.00	2.72	7.80	------	.84	.37	.44	.14	.38	.24	.17	.23
Story	.53	.34	.95	.96	------	.70	.82	11.22	8.75	16.00	2.58	13.00	------	1.22	.42	.45	.13	.43	.25	.26	------
Tama	.53	.31	.94	1.06	.55	.72	.64	9.06	7.25	------	2.75	11.20	.06	.92	.41	.39	.13	.42	.26	.25	.20
Webster	.52	.29	.85	.87	.55	------	.86	12.75	9.40	16.80	2.25	6.67	.09	1.35	.39	.41	.14	.42	.22	.16	.17
For District	$ .54	$ .33	$ .95	$ .98	$ .55	$ .72	$ .71	$10.32	$ 8.07	$13.87	$ 2.53	$10.61	$ .05	$ 1.15	$ .42	$ .42	$ .14	$ .41	$ .23	$ .21	$ .19

AVERAGE PRICE OF FARM PRODUCTS, DECEMBER 1, 1922, BY COUNTIES—Continued

Districts and Counties	Corn per bushel of 70 lbs. in ear or 56 lbs. shelled	Oats per bushel of 32 pounds	Spring wheat per bushel of 60 pounds	Winter wheat per bushel of 60 pounds	Barley per bushel of 48 pounds	Rye per bushel of 56 pounds	White potatoes (Irish) per bushel of 60 pounds	Tame hay (loose) per ton of 2,000 pounds	Wild hay (loose) per ton of 2,000 pounds	Alfalfa (loose) per ton of 2,000 pounds	Timothy seed per bushel of 45 pounds	Clover seed per bushel of 60 pounds	Pop-corn, per pound, shelled	Apples, per bushel of 48 pounds	Cream per pound of butter fat	Butter, per pound	Chickens (live wgt.) per pound	Eggs, per dozen	Honey (per lb.) Comb in sections	Honey (per lb.) Extracted (less cost of container)	Honey (per lb.) In bulk
East Central–																					
Benton	$ .55	$ .36	$ .97	$ .99	$ .58	$ .56	$ .71	$ 9.43	$ 7.00	$15.00	$ 3.00	$ 9.79	$ .08	$ 1.03	$ .44	$ .41	$ .15	$ .44	$ .22	$ .15	$ .13
Cedar	.57	.35	.92	.98	.51	.70	.87	11.33	------	15.00	2.96	10.33	.04	1.11	.44	.44	.13	.43	.22	.20	.20
Clinton	.59	.35	1.00	1.01	.60	.69	.76	11.20	6.67	15.00	2.20	11.60	------	1.30	.42	.42	.16	.40	.17	.15	.15
Iowa	.52	.35	.93	.94	.53	.87	.67	11.33	------	------	2.39	9.39	.12	.92	.40	.44	.13	.46	.23	.22	.15
Jackson	.57	.37	.92	.95	.62	.80	.67	13.75	12.00	17.83	2.43	10.39	.05	1.08	.44	.45	.13	.44	.22	.23	.21
Johnson	.55	.35	.94	.99	.59	.79	.72	10.85	------	10.00	2.20	10.42	.03	1.22	.43	.42	.13	.47	.22	.18	.16
Jones	.57	.37	------	------	.53	------	.70	11.50	------	16.00	2.35	9.75	------	1.21	.48	.47	.15	.45	.20	.17	.15
Linn	.54	.36	.91	.96	.56	.63	.64	10.44	9.25	------	2.83	12.58	.05	1.06	.44	.45	.15	.42	.25	.17	------
Muscatine	.57	.31	.98	1.01	.61	.76	.72	10.44	7.50	14.50	2.25	9.66	.04	.99	.46	.43	.15	.43	.20	.21	.12
Scott	.57	.38	.96	1.00	.54	.78	.71	14.62	10.80	19.41	2.33	10.50	.06	1.02	.42	.42	.16	.42	.21	.16	.19
For District	$ .56	$ .36	$ .95	$ .98	$ .57	$ .73	$ .72	$11.49	$ 8.87	$15.34	$ 2.49	$10.44	$ .06	$ 1.09	$ .44	$ .44	$ .14	$ .44	$ .21	$ .18	$ .16
Southwest—																					
Adair	$ .55	$ .34	$ .93	$ .97	$ .57	$ .78	$ .74	$ 8.33	$ 6.25	$12.67	$ 2.00	$ 9.57	$ .04	$ .91	$ .40	$ .39	$ .14	$ .37	$ .18	$ .15	$ .15
Adams	.60	.36	.85	.96	.48	------	.75	15.17	8.00	14.00	2.60	9.75	.05	.89	.44	.42	.14	.42	.22	.16	.16
Cass	.58	.36	.94	1.00	.50	.66	.68	11.31	8.90	13.80	2.21	10.50	.05	.98	.42	.41	.13	.40	.27	.20	.17
Fremont	.56	.34	.92	.99	------	------	.79	11.75	8.25	11.14	3.25	13.00	------	.91	.35	.37	.14	.36	.25	.15	.12
Mills	.59	.32	1.00	.99	.55	.72	.59	10.60	10.00	12.50	3.25	11.00	.03	.95	.39	.38	.14	.42	.18	.14	.12
Montgomery	.57	.34	1.00	1.01	.48	.78	.60	9.71	7.00	12.43	2.80	10.66	.04	.84	.42	.42	.14	.40	.25	.22	.25
Page	.57	.35	.97	.99	.50	.80	.75	11.50	10.00	15.40	2.94	10.75	------	1.11	.42	.40	.13	.34	.30	.25	------
Pottawattamie	.59	.33	1.00	1.00	.53	.80	.61	13.25	10.86	13.33	2.25	13.67	------	1.21	.43	.39	.14	.43	.25	.25	------
Taylor	.50	.37	.90	.96	------	.75	1.10	9.67	10.00	13.50	2.42	8.50	------	.68	.42	.43	.16	.35	.30	.25	.25
For District	$ .57	$ .35	$ .95	$ .99	$ .52	$ .76	$ .74	$11.25	$ 8.81	$13.19	$ 2.64	$10.82	$ .04	$ .94	$ .41	$ .40	$ .14	$ .39	$ .24	$ .20	$ .17

South Central—																					
Appanoose	$ .56	$ .37	$ .96	$ .96	$ .70	$ .74	$ .74	$10.66	$ 9.00	------	$ 2.25	$10.00	$ .04	$ 1.13	$ .38	$ .41	$ .15	$ .39	$ .25	$ .12	$ .15
Clarke	.55	.34	1.00	.92	.80	.75	.86	7.50	------	------	2.11	9.87	------	1.14	.39	.33	.14	.35	.22	------	------
Decatur	.58	.35	1.00	.95	------	.75	.75	7.44	4.75	$10.00	2.01	9.25	.05	.98	.39	.37	.13	.40	.22	.22	.19
Lucas	.57	.32	1.00	.95	------	------	.76	9.33	8.00	14.75	2.32	8.72	.03	.94	.41	.42	.15	.42	.25	.22	.19
Madison	.55	.32	.98	.95	.46	.65	.72	7.60	6.00	11.67	2.13	8.97	.04	.87	.37	.36	.12	.40	.25	.17	.18
Marion	.57	.34	.96	1.08	.50	.75	.69	9.28	------	11.62	2.54	10.56	------	1.08	.42	.36	.14	.40	.21	.14	.16
Monroe	.54	.34	.92	.93	.50	.68	.87	9.30	------	20.00	1.97	8.38	.04	.93	.40	.34	.13	.43	.25	.22	.18
Ringgold	.56	.36	.92	.95	.55	.74	.94	7.93	6.50	14.00	2.16	9.91	------	.94	.39	.37	.14	.38	26	.21	.20
Union	.54	.34	.94	.96	.51	.65	.69	8.38	6.00	15.00	2.09	8.67	.04	.92	.43	.37	.12	.38	.23	.22	.20
Warren	.56	.34	.96	1.02	.51	.72	.71	8.80	6.67	11.17	2.24	11.60	.04	.97	.44	.40	.14	.41	.21	.18	.16
Wayne	.59	.35	1.01	.97	------	.75	.83	8.22	4.00	------	2.23	9.00	.05	1.11	.42	.39	.13	.42	.24	.17	.19
For District	$ .56	$ .34	$ .97	$ .95	$ .57	$ .72	$ .78	$ 8.59	$ 6.36	$14.65	$ 2.19	$ 9.54	$ .04	$ 1.00	$ .40	$ .37	$ .14	$ .40	$ .23	$ .19	$ .18
Southeast—																					
Davis	$ .61	$ .37	$ 1.00	$ 1.00	------	$ .75	$ .79	$ 7.81	------	$10.00	$ 2.44	$10.14	$ .08	$ 1.03	$ .35	$ .40	$ .14	$ .37	$ .26	$ .18	$ .20
Des Moines	.56	.37	.97	1.01	$ .50	.70	.77	10.67	------	10.00	2.77	9.02	.05	.62	.43	.42	.15	.47	.22	[illegible]	------
Henry	.58	.35	.96	1.02	.45	.73	.72	9.70	------	14.00	2.82	9.72	.04	1.03	.43	.41	.16	.44	.25	.14	.22
Jefferson	.55	.36	.93	.96	.55	.72	.88	8.75	------	12.00	2.27	9.66	.08	.88	.41	.48	.15	.46	.17	.16	.12
Keokuk	.56	.36	.97	.98	------	------	.84	9.00	------	------	2.48	9.38	.07	1.30	.42	.35	.14	.42	.25	.20	.19
Lee	.58	.34	.98	1.01	------	.72	.80	9.50	------	14.00	2.11	10.39	.04	.73	.41	.38	.14	.46	.20	.18	.16
Louisa	.48	.36	.90	.98	------	.68	.86	9.88	------	15.67	2.20	10.56	------	1.08	.38	.38	.14	.38	.25	.20	.14
Mahaska	.53	.32	.93	.96	.55	.67	.75	8.40	------	12.00	2.17	10.22	.04	1.02	.38	.38	.14	.40	[illegible]	.23	.24
Van Buren	.59	.36	.92	.99	------	.69	.82	9.00	------	15.00	2.20	9.58	.05	.75	.44	.39	.14	.44	.22	.16	.15
Wapello	.58	.38	.84	.86	------	.85	.78	10.70	$ 8.00	18.57	2.41	9.50	.04	.94	.39	.42	.14	.43	.23	.22	.18
Washington	.56	.36	.89	.96	------	.60	.74	9.43	------	15.00	2.75	9.00	.06	.94	.42	.43	.14	.40	.25	.18	------
For District	$ .56	$ .36	$ .94	$ .93	$ .51	$ .71	$ .80	$ 9.35	$ 8.00	$13.62	$ 2.42	$ 9.74	$ .06	$ .94	$ .41	$ .40	$ .14	$ .42	$ .23	$ .18	$ .18
For State	$ .54	$ .34	$ .95	$ .97	$ .52	$ .71	$ .62	$10.40	$ 8.50	$14.80	$ 2.49	$10.40	$ .03	$ 1.26	$ .43	$ .42	$ .14	$ .40	$ .22	$ .19	$ .18

MISCELLANEOUS TABLE, BY COUNTIES

Corn husked; average and total yield clover and timothy seed; per cent of apples shipped out; firewood and coal.

Districts and Counties	Corn	Clover Seed		Timothy Seed			Firewood				Coal	
									Value per Cord			
	Husked Dec. 1	Average yield per acre	Total yield	Average yield per acre	Total yield	Apples shipped out of county where grown	Average cords cut per farm	Average cords burned, per farm	Short cords	Long cords	Number tons consumed, per farm	Average cost, per ton
	Per cent	Bushels of 60 Lbs.	Bushels of 60 Lbs.	Bushels of 45 Lbs.	Bushels of 45 Lbs.	Per cent	128 Cu. Ft.	128 Cu. Ft.	43 Cu. Ft.	128 Cu. Ft.	Tons of 2,000 Lbs.	Tons of 2,000 Lbs.
Northwest—												
Buena Vista	94	3.0	1,290	3.0	120	5	3	2	$ 2.16	$ 5.20	5	$13.95
Cherokee	94	1.7	840	5.0	780	0	3	4	3.17	6.75	3	13.00
Clay	77	1.7	510	2.1	1.650	0	1	1	3.00	5.00	3	13.16
Dickinson	84	2.5	330	3.9	1.540	0	------	------	------	------	6	13 86
Emmet	76	1.5	210	3.2	130	0	2	2	2.87	6.67	5	14.07
Lyon	86	2.4	340	3.2	170	0	6	6	------	6.33	4	15.90
O'Brien	88	1.3	690	3.2	3.260	0	6	7	4.00	6.16	4	15.28
Osceola	77	1.5	510	4.5	3,810	0	8	7	------	5.00	4	16 83
Palo Alto	73	1.5	310	3.0	340	0	2	3	2 00	3.50	8	14.00
Plymouth	81	1.7	1,090	4.5	900	0	13	8	3.34	5.10	6	14.06
Pocahontas	86	1.4	400	3 2	300	0	3	3	2.00	5.00	8	10.37
Sioux	94	1.7	450	3.2	180	0	5	5	------	5.00	3	15.75
For District	84	1.68	7,000	3.21	13,180	0	4	4	$ 2.82	$ 5.43	5	$13.40
North Central—												
Butler	91	2.1	550	4.5	5.070	0	10	------	2.75	5.00	6	11 60
Cerro Gordo	92	1.4	710	5.0	1,920	0	------	------	------	------	10	10.37
Floyd	87	1.5	480	4 3	11,540	6	2	2	2.00	5.83	6	11.58
Franklin	86	2 6	1,670	6.5	2,810	5	4	4	2.60	6.12	10	10.40
Hancock	86	1.3	400	3 0	120	1	4	4	2.50	5.7[illegible]	6	12.18
Humboldt	84	1.4	100	4.4	240	0	1	1	------	------	8	12.25
Kossuth	82	2.1	1,3[illegible]0	4.6	710	0	6	4	3.00	7.16	10	14.08
Mitchell	92	1.2	40	4.3	19,970	0	4	4	2.50	6.67	7	11.16
Winnebago	91	1.4	100	6.0	690	2	2	2	2.12	5.50	5	13 08
Worth	92	2.4	780	4.3	3,990	4	5	5	2.67	5.90	6	11.12
Wright	86	2.3	820	2.8	780	5	4	4	1.83	4.64	8	10.70
For District	88	1.7	7,000	4.36	47,640	2	4	3	$ 2.45	$ 5.84	7	$11.35
Northeast—												
Allamakee	89	1.7	3,020	6.3	27,710	0	24	14	$ 4.67	$ 6.30	11	$12.75
Black Hawk	86	2.1	920	6.2	5,470	6	4	4	2.75	4.75	6	11.83
Bremer	91	2.1	300	4.0	910	[illegible]	10	11	2.44	6.90	4	12.90
Buchanan	83	1.4	890	4.5	4.650	4	12	10	1.67	5.67	7	10.21
Chickasaw	88	1.3	40	4.4	24,33	0	16	13	------	6.00	5	13.67
Clayton	96	1.3	7,510	5.6	18,770	8	12	12	3.88	6.80	5	11.97
Delaware	89	2.5	1,480	5 5	8,860	0	7	9	3.80	5.57	6	10.93
Dubuque	95	1.6	7,140	7.0	9,560	8	8	8	4.75	6.62	7	9.17
Fayette	88	1.1	570	4.5	21.280	0	8	9	3.00	6.75	12	11.50
Howard	97	1.5	20	4.7	39.450	0	4	8	------	6.33	6	11.00
Winneshiek	95	1.1	110	4.3	40,740	0	11	10	------	6.00	6	11.16
For District	91	1.67	22,000	5.16	201,730	2	11	10	$ 3.37	$ 6.15	7	$11.30

MISCELLANEOUS TABLE—Continued

Districts and Counties	Corn	Clover Seed		Timothy Seed			Firewood				Coal	
	Husked Dec. 1	Average yield per acre	Total yield	Average yield per acre	Total yield	Apples shipped out of county where grown	Average cords cut per farm	Average cords burned, per farm	Value per Cord: Short cords	Value per Cord: Long cords	Number tons consumed, per farm	Average cost, per ton
	Per cent	Bushels of 60 Lbs.	Bushels of 60 Lbs.	Bushels of 45 Lbs.	Bushels of 45 Lbs.	Per cent	128 Cu. Ft.	128 Cu. Ft.	43 Cu. Ft.	128 Cu. Ft.	Tons of 2.000 Lbs.	Tons of 2.000 Lbs.
West Central—												
Audubon	96	1.9	1,100	4.0	9.390	0	3	3	$ 2.00	------	4	$13.70
Calhoun	88	1.8	700	2.0	140	0	------	------	------	------	8	9.80
Carroll	92	1.7	3,800	3.9	4,310	0	2	1	1.50	$ 4.00	9	10.25
Crawford	87	2.6	5,820	3 0	1.650	2	6	6	3.00	7.33	5	10.71
Greene	84	1.7	860	3.0	620	1	2	3	2.75	5.50	12	8.33
Guthrie	82	1.7	4,530	4.4	27,870	3	6	11	2.25	5.00	8	6.17
Harrison	75	1.8	740	3.9	610	------	8	9	1.50	5.62	2	13.33
Ida	94	1.7	570	5.	980	0	2	5	------	4.50	4	11.30
Monona	89	2.5	5,840	4	260	4	4	4	2.25	4.25	4	18.00
Sac	86	1.7	1,140	5.7	3.200	3	2	2	3.00	7.50	10	12.43
Shelby	89	1.7	6.040	3.9	5,120	0	16	14	3.00	7.00	5	12.00
Woodbury	82	2.6	5.810	2.5	580	3	------	5	------	------	3	11.50
For District	87	1.75	37,000	3.89	54.730	1	4	6	$ 2.36	$ 5.63	7	$11.50
Central—												
Boone	84	2.0	870	3.7	210	9	5	5	$ 3.50	$ 7.50	9	$ 7.22
Dallas	81	1.3	900	5.3	1,160	13	12	10	4.17	6.75	9	8.21
Grundy	89	2.2	540	5.6	5.100	2	16	9	2.08	5.33	6	12.81
Hamilton	87	1.6	510	5.1	1.120	0	4	4	2.90	5.20	6	10.83
Hardin	83	1.5	1.570	5.0	1,440	1	4	5	2.00	5.00	6	11.00
Jasper	80	1.7	5.400	5.5	4.600	12	5	5	2.00	4.50	9	8.19
Marshall	86	1.7	2.860	5.7	16.010	8	6	8	3.00	4.00	6	10.11
Polk	85	1.5	1,640	4.1	390	3	6	6	2.38	4.25	12	6.52
Poweshiek	86	1.6	4,840	5.1	50.540	3	4	4	------	6.00	8	8 62
Story	87	1.3	90	5.5	510	0	12	6	2.62	7.33	5	9 04
Tama	89	1.7	3.170	4.4	18,750	9	5	4	2.25	5.40	4	12 22
Webster	86	2.0	520	4.3	520	5	3	6	2.00	4.40	7	10.79
For District	85	1.75	23,000	5.59	100.350	8	7	6	$ 2.63	$ 5.47	7	$ 9.65
East Central—												
Benton	96	1.6	1.910	6.8	12.130	10	9	9	$ 2.69	$ 5.58	7	$13 33
Cedar	92	2.4	1,880	5.0	8,520	1	8	8	2.90	5.54	6	10.44
Clinton	96	1.1	300	4.9	3.870	15	4	4	1.75	3.90	8	8.50
Iowa	92	1.7	6,040	5.3	104.040	8	6	5	3.12	5.60	12	10.75
Jackson	95	1.1	1,600	4.5	2.620	6	12	11	2.18	4.59	2	12.33
Johnson	94	1.8	4,730	5.8	12.210	3	11	12	2.33	6.00	5	10 33
Jones	92	1.4	440	4.1	2.600	0	6	6	------	5.75	5	10.3
Linn	93	1.8	2,430	4.8	3.790	17	6	6	3.33	5.83	8	11 21
Muscatine	95	1.7	1.140	5.2	3.080	2	4	7	2.30	5.00	8	7 92
Scott	99	2.0	2,530	5.7	2.220	6	6	6	2.90	5.60	7	9.21
For District	94	1.75	23,000	5.80	155.080	7	7	7	$ 2.61	$ 5.34	7	$10.25
Southwest—												
Adair	87	1.6	1.970	4.2	19.820	2	6	9	------	$ 5.33	8	$10.07
Adams	80	1.9	840	5.0	7.330	18	12	9	$ 3.00	5.50	6	8.30
Cass	85	2.1	4.780	5.5	5,600	5	13	9	2.67	4.00	7	7.22
Fremont	69	1.4	1.380	4.4	270	33	6	6	3.67	5.00	3	11.50
Mills	79	2.1	860	5.0	200	7	6	6	3.50	5.25	6	12 38
Montgomery	86	1.4	1.700	3.7	640	4	5	5	2.25	3.40	6	9.15
Page	83	1.8	1.470	3.7	300	3	3	5	2.50	4.62	5	9.58
Pottawattamie	77	2.4	7.100	4.5	5.680	12	9	9	------	3.00	8	12.35
Taylor	76	1.1	900	4.8	11.765	18	3	3	3.00	4.00	9	10.32
For District	80	1.66	21,000	4.37	51,690	9	7	7	$ 2.94	$ 4.46	6	$10.00

MISCELLANEOUS TABLE—Continued

Districts and Counties	Corn	Clover Seed		Timothy Seed			Firewood				Coal	
									Value per Cord			
	Husked Dec. 1	Average yield per acre	Total yield	Average yield per acre	Total yield	Apples shipped out of county where grown	Average cords cut per farm	Average cords burned, per farm	Short cords	Long cords	Number tons consumed, per farm	Average cost, per ton
	Per cent	Bushels of 60 Lbs.	Bushels of 60 Lbs.	Bushels of 45 Lbs.	Bushels of 45 Lbs.	Per cent	128 Cu. Ft.	128 Cu. Ft.	43 Cu. Ft.	128 Cu. Ft.	Tons of 2 000 Lbs.	Tons of 2,000 Lbs.
South Central—												
Appanoose	81	2.4	1,380	4.1	33,250	9	6	6	$ 1.00	$ 3.00	6	$ 4.00
Clarke	71	1.0	1,900	4.2	36,150	0	10	10	2.67	7.00	6	8.67
Decatur	72	1.2	620	3.6	44,770	11	14	13	2.07	4.44	7	7 61
Lucas	86	1.7	2,920	3.9	30,590	4	14	12	1.87	4.25	9	7.87
Madison	78	1.6	3.860	4.5	7,020	29	5	5	2.00	3.75	8	9.00
Marion	74	1.6	5,680	4.3	1,430	4	14	15	2.08	3.90	9	5.64
Monroe	7[illegible]	1.5	1,090	4.2	4,6[illegible]0	14	8	7	2.82	4.40	9	4.94
Ringgold	80	1.2	950	3 9	34,400	20	12	12	2.83	3.80	7	7.88
Union	82	1.6	2,0[illegible]0	4.1	20.090	16	7	8	3.17	------	7	10.00
Warren	76	1.5	2,920	4.0	5,700	23	13	12	2.80	4.55	10	7.50
Wayne	70	1.5	2,680	3.9	80,000	3	8	16	1.69	4.38	8	8.85
For District	77	1.67	26,000	3.95	298,000	12	10	11	$ 2.27	$ 4.35	8	$ 7.45
Southeast—												
Davis	86	1.7	2,450	4.5	50,700	12	17	18	$ 2.39	$ 3.83	6	$ 4.65
Des Moines	88	1.6	4,350	6 2	3 940	14	9	9	1.62	4.2[illegible]	9	8.[illegible]9
Henry	93	1.2	3,050	5.1	2 950	8	8	8	2.00	5.00	6	7.67
Jefferson	89	1.5	8,160	5.8	8,480	17	9	8	2.15	4.36	5	8.70
Keokuk	88	1.3	5,540	4.7	6 060	3	14	13	3.31	4.88	5	8 08
Lee	85	1.6	6,770	5.0	20,[illegible]20	24	12	10	2.50	5.60	9	8.90
Louisa	85	1.3	1,220	4.4	2,380	6	6	5	4.00	5.08	6	9 39
Mahaska	86	1.2	3,540	4.4	1,430	13	8	9	2.33	4.00	11	3.68
Van Buren	86	1.2	5,000	4.1	15,656	26	11	12	2.70	3.86	9	8.40
Wapello	79	2.5	2,800	4.2	3.830	19	8	6	1.95	3.70	10	5.39
Washington	87	2.3	15,120	4.8	3,610	10	6	6	4.62	5.00	8	10.75
For District	87	1.67	58,000	4.57	119.600	14	10	9	$ 2.69	$ 4.51	7	$ 7.60
For State	86	1.7	224,000	4.53	1,042,000	8	7.5	7.3	$ 2.81	$ 5.20	6.6	$10.25

AVERAGE YIELD PER ACRE OF PRINCIPAL IOWA CROPS

From records of the Iowa Weather and Crop Service

Year	Corn	Oats	Spring Wheat	Winter Wheat	Barley	Rye	Flax Seed	Potatoes	Tame Hay	Wild Hay	Alfalfa
1890	27.9	28.7	11.4	16.5	24.0	16.8	9.1	48.8	1.4	------	------
1891	38.0	40.0	15.0	20.0	29.0	20.0	10.7	142.0	1.7	------	------
1892	29.0	25.0	12.2	17.0	24.3	15.5	8.0	51.0	1.8	------	------
1893	35.7	24.0	12.4	15.8	22.6	16.3	9.1	59.2	1.7	1.4	------
1894	12.0	24.0	12.8	16.7	18.4	15.1	8.0	40.7	0.8	------	------
1895	38.0	48.0	19.0	19.0	33.0	19.0	11.0	106.0	1.1	1.0	------
1896	39.0	26.0	13.0	17.0	29.0	16.0	9.5	87.0	1.5	1.5	------
1897	29.0	30.0	13.4	13.0	25.5	15.0	10.0	61.6	1.6	1.3	------
1898	34.5	32.5	14.8	16.5	27.7	16.0	10.5	76.0	1.7	1.2	------
1899	36.3	34.5	12.7	11.3	26.4	16.3	11.2	98.8	1.5	1.2	------
1900	40.3	34.7	14.3	13.3	25.3	15.6	11.2	73.0	1.4	1.1	------
1901	26.2	30.2	15.3	17.6	24.2	15.8	8.8	37.4	1.4	1.2	------
1902	34.1	31.0	13.0	18.0	25.0	17.0	8.0	87.1	1.8	1.3	------
1903	31.2	25.9	12.6	16.9	24.7	15.6	8.7	53.8	1.9	1.3	------
1904	36.0	29.4	9.1	14.3	25.0	15.0	11.0	125.0	1.5	1.2	------
1905	37.2	33.8	14.4	20.2	27.5	18.0	9.8	84.0	1.8	1.2	------
1906	41.1	34.0	15.0	23.0	26.5	17.5	10.7	101.0	1.3	1.2	------
1907	29.6	24.5	13.0	19.8	24.6	17.0	10.8	84.0	1.5	1.3	------
1908	35.9	25.5	15.4	19.7	26.7	17.1	11.3	89.9	1.8	1.6	------
1909	32.9	27.4	13.6	20.5	21.6	16.3	10.0	88.0	1.7	1.4	------
1910	39.7	38.9	20.2	22.3	30.5	18.8	10.2	79.0	1.2	------	------
1911	32.9	25.7	13.1	19.7	22.9	16.8	8.5	70.7	0.8	0.9	------
1912	45.8	44.4	18.7	24.3	32.5	20.7	11.3	104.0	1.6	1.4	------
1913	34.9	34.2	15.1	23.1	23.8	18.3	10.0	47.3	1.5	1.3	------
1914	39.0	34.0	13.0	22.0	26.0	19.0	11.0	87.0	1.4	1.3	3.6
1915	30.0	38.6	15.9	21.3	30.6	18.6	9.5	93.0	1.8	1.3	3.6
1916	35.3	37.0	13.4	17.5	30.7	22.8	10.3	42.3	1.8	1.4	4.4
1917	40.0	46.0	18.0	18.0	35.0	20.0	11.0	109.0	1.3	1.2	3.4
1918	34.7	40.5	18.2	19.9	31.3	18.1	10.1	76.1	1.3	1.2	2.8
1919	41.6	34.6	9.5	17.4	25.5	15.9	9.5	43.0	1.6	1.3	3.2
1920	46.0	39.0	11.3	19.7	27.5	16.2	10.0	110.0	1.44	1.27	2.84
1921	43.0	26.0	10.3	19.2	23.5	16.1	8.7	43.0	1.39	1.16	2.97
1922	45.0	37.0	15.0	23.0	28.4	19.0	10.0	106.0	1.40	1.14	2.67
Avg. 1890 to 1899	31.9	31.3	13.7	16.3	26.0	16.6	9.7	77.1	1.48	1.27	------
Avg. 1900 to 1909	34.5	30.1	13.4	18.1	25.1	16.5	10.0	82.3	1.61	1.28	------
Avg. 1910 to 1919	37.4	37.4	15.5	20.6	28.9	18.9	10.1	75.1	1.42	1.23	------
Avg. 1913 to 1922	38.9	36.7	14.0	20.1	28.2	18.4	10.0	75.7	1.49	1.26	3.2

UNITED STATES CROP SUMMARY, DECEMBER 1, 1922

The December estimates of the Crop Reporting Board of the Bureau of Agricultural Economics of the Acreage, Production, and Value (based on prices paid to farmers on December 1) of the important farm crops of the United States in 1920, 1921, and 1922, based on the reports of the correspondents and agents of the Bureau, are as follows:

Crop		Acreage	Production			Farm Value December 1	
			Per Acre	Total	Unit	Per Unit	Total
						Cents	Dollars
Corn	—1920	101,699,000	31.5	3,208,584,000	bu.	67.0	$2,150,332.000
	—1921	103,740,000	29.6	3,068,569,000	bu.	42.3	1,297,213,000
	—1922	102,428,000	28.2	2,890,712,000	bu.	65.7	1,900,287,000
Winter Wheat	—1920	40,016,000	15.3	610,597,000	bu.	148.6	907,291,000
	—1921	43.414,000	13.8	600,316,000	bu.	95.1	571,044,000
	—1922	42,127,000	13.9	586,204,000	bu.	104.8	614,561,000
Spring Wheat	—1920	21,127,000	10.5	222,430,000	bu.	130.4	289,972,000
	—1921	20,282,000	10.6	214,589,000	bu.	85.6	183,790,000
	—1922	19,103,000	14.1	270,007,000	bu.	92.4	249,578,000
All Wheat	—1920	61,143,000	13.6	833,027,000	bu.	143.7	1,197,263.000
	—1921	63,696,000	12.8	814.905,000	bu.	92.6	754,834,000
	—1922	61,230,000	14.0	856,211,000	bu.	100.9	864,139,000
Oats	—1920	42,491,000	35.2	1,496,281,000	bu.	46.0	688,311,000
	—1921	45,495.000	23.7	1,078,341,000	bu.	30.2	325,954,000
	—1922	40,693,000	29.9	1,215,496,000	bu.	39.4	478,548,000
Barley	—1920	7,600,000	24.9	189,332,000	bu.	71.3	135,083,000
	—1921	7,414,000	20.9	154.946,000	bu.	41.9	64,934.000
	—1922	7,390,000	25.2	186,110,000	bu.	52.5	97,751,000
Rye	—1920	4,409,000	13.7	60,490,000	bu.	126.8	76.693,000
	—1921	4,528,000	13.6	61,675,000	bu.	69.7	43,014,000
	—1922	6,210,000	15.4	95,497,000	bu.	69.2	66,085,000
Buckwheat	—1920	701,000	18.7	13,142.000	bu.	128.3	16,863,000
	—1921	680,000	20.9	14,207,000	bu.	81.2	11,540,000
	—1922	785,000	19.2	15,050,000	bu.	88.5	13,312,000
Flax Seed	—1920	1,757,000	6.1	10,774,000	bu.	176.7	19,039,000
	—1921	1,108,000	7.2	8,029,000	bu.	145.1	11,648,000
	—1922	1,308,000	9.4	12,238,000	bu.	211.4	25,869,000
Potatoes	—1920	3,657,000	110.3	403,296,000	bu.	114.5	461,778,000
	—1921	3,941,000	91.8	361,659,000	bu.	110.1	398,362,000
	—1922	4,331,000	104.2	451,185,000	bu.	58.2	262,608,000
Sweet Potatoes	—1920	992,000	104.8	103,925,000	bu.	113.4	117,834,000
	—1921	1,066,000	92.5	98,654,000	bu.	88.1	86,894,000
	—1922	1,116,000	98.1	109,534,000	bu.	77.1	84,492,000
Hay, tame	—1920	58,101,000	1.51	87,855,000	tons	$ 17.76	1,560,235,000
	—1921	58,769,000	1.40	82,379,000	tons	$ 12.11	997,527,000
	—1922	61,208,000	1.58	96,687,000	tons	$ 12.59	1,217,044,000
Hay, wild	—1920	15,787,000	1.11	17,460,000	tons	$ 11.35	198,115,000
	—1921	15,632,000	.98	15,391,000	tons	$ 6.63	101,991,000
	—1922	15,842,000	1.02	16,104,000	tons	$ 7.12	114,635,000
All Hay	—1920	73,888,000	1.43	105,315,000	tons	$ 16.70	1,758.350,000
	—1921	74,401,000	1.31	97,770,000	tons	$ 11.25	1,099,518,000
	—1922	77,050,000	1.46	112,791,000	tons	$ 11.81	1,331,679,000
Cotton	—1920	35,878,000	[a]178.4	13,439,603	bales	[b]13.9	933,658,000
	—1921	30,509,000	[a]124.5	7,953,641	bales	[b]16.2	643,933,000
	—1922	33,742,000	[a]141.6	9,964,000	bales	[b]23.8	1,190,761,000

UNITED STATES CROP SUMMARY—Continued.

Crop		Acreage	Production			Farm Value December 1	
			Per Acre	Total	Unit	Per Unit	Total
						Cents	Dollars
Cotton Seed	—1920			5,971,000	tons	$ 26.00	155,246,000
	—1921			3,531,000	tons	$ 29.15	102,929,000
	—1922			4,424,000	tons	$ 40.18	177,756,000
Clover Seed	—1920	1,082,000	1.8	1,944,000	bu.	$ 11.95	23,227,000
	—1921	889,000	1.7	1,538,000	bu.	$ 10.75	16,529,000
	—1922	1,126,000	1.7	1,875,000	bu.	$ 10.08	18,905,000
Sugar Beets	—1921[c]	815,000	9.55	7,782,000	tons	$ 6.38	49,626,000
	—1922[c]	537,000	9.76	5,243,000	tons	$ 5.65	29,605,000
Beet Sugar	—1921[c]	815,000	2,504	2,040,978,000	lbs.		
	—1922[c]	537,000	2,574	1,382,000,000	lbs.		
Sorghum Sirup	—1920	536,000	92.4	49,505,000	gals.	106.9	52,943,000
	—1921	518,000	88.0	45,566,000	gals.	62.9	28,681,000
	—1922	448,000	81.5	36,532,000	gals.	71.0	25,946,000
Beans[d]	—1920	847,000	10.8	9,185,000	bu.	$ 2.95	27,134,000
	—1921	777,000	11.8	9,150,000	bu.	$ 2.67	24,399,000
	—1922	1,043,000	11.4	11,893,000	bu.	$ 3.74	44,429,000
Grain Sorghums[d]	—1920	5,120,000	26.8	137,408,000	bu.	92.9	127,629,000
	—1921	4,635,000	24.6	113,990,000	bu.	39.1	44,575,000
	—1922	5,051,000	17.9	90,381,000	bu.	87.6	79,136,000
Onions[de]	—1921	57,900	249	14,406,000	bu.	[f]$ 1.31	18,856,000
	—1922	64,200	279	17,940,000	bu.	[f]$ 0.92	16,471,000
Cabbage[de]	—1921	103,300	6.5	673,900	tons	[f]$ 24.66	16,612,000
	—1922	134,600	8.2	1,097,600	tons	[f]$ 13.03	14,301,000
Apples, total	—1920			223,677,000	bu.	114.8	256,699,000
	—1921			99,002,000	bu.	168.0	166,343,000
	—1922			203,628,000	bu.	99.3	202,102,000
Apples, commercial	—1920			33,905,000	bbls.	$ 3.74	126,800,000
	—1921			21,557,000	bbls.	$ 4.60	99,131,000
	—1922			31,090,000	bbls.	$ 2.94	91,534,000
Peaches	—1920			45,620,000	bu.	210.4	95,970,000
	—1921			32,602,000	bu.	158.7	51,739,000
	—1922			56,705,000	bu.	133.3	75,613,000
Pears	—1920			16,805,000	bu.	165.8	27,865,000
	—1921			11,297,000	bu.	170.6	19,268,000
	—1922			18,661,000	bu.	106.0	19,789,000
Total[g]	—1920	347,847,300					9,125,620,000
	—1921	348,435,600					5,729,912,000
	—1922	348,969,800					7,572,890,000

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[a]Pounds per acre. [b]Cents per pound. [c]Including beets grown in Canada for United States factories. [d]Principal producing states. [e]Commercial crop. [f]Price for season. [g]Some crops omitted from body of table.

The wheat crop of 1922 is 5 per cent greater than the crop of 1921 instead of 3 per cent as shown in preliminary estimates. The production of 856,000,000 bushels should be compared with the revised estimated 1921 production of 815,000,000 and not with the preliminary estimate of 794,000,000. Like comparisons should be made for other crops.

WORLD CORN PRODUCTION, 1922.

The total area planted to corn during 1922 in 13 countries amounted to 131,893,000 acres compared with 133,613,000 acres for the same countries in 1921 and an average of 133,639,000 acres for the period 1909-13.

The corn production for 16 countries this year amounts to 3,455,712,000 bushels, as compared with 3,792,537,000 bushels for the same countries last year, and an average of 3,573,096,000 bushels for the five years 1909-13. Decreases were shown for all countries reporting except Canada, Hungary and Chile. The production of the United States, Canada and Mexico this year is 2,972,077,000 bushels as compared with 3,166,281,000 bushels in 1921 and 2,894,318,000 bushels for the period 1909-13. Six European countries produced 273,554,000 bushels in 1922, as compared with 324,530,000 bushels last year and 459,494,000 bushels for 1909-13. Five countries in the southern hemisphere produced 195,160,000 bushels this year, as compared with 284,638,000 bushels in 1921 and 210,377,000 bushels for the period 1909-13. Reports are not available for many of the tropical corn producing countries of which Brazil is probably the most important. The Brazilian corn crop for 1920-21 was estimated to be about 186,450,000 bushels.

The United States and Argentina supply approximately 80 per cent of the corn entering into the world trade. Argentina frequently exceeds the United States in the quantity of corn exported, but in 1921 shipments from the United States exceeded those from Argentina by 21,000,000 bushels. In 1920, exports from Argentina were 50 per cent more than the prewar average, but in 1921 were slightly less than for the period 1909-13. The United States exported 132,000,000 bushels in 1921 as compared with 45,000,000 bushels during the period 1909-13, an increase of 193 per cent. Exports from Rumania show a decided decrease, amounting to 17,000,000 bushels and 30,000,000 bushels in 1920 and 1921, respectively, as compared with the prewar average of 39,000,000 bushels. Imports into the United Kingdom, France, Germany and Belgium show a decrease over the prewar years. In 1921 the United Kingdom took 78,000,000 bushels as compared with 83,000,000 bushels during 1909-13, France 12,000,000 bushels as compared with the prewar average of 19,000,000 bushels; Belgium 19,000,000 bushels as compared with 26,000,000 bushels during the prewar period; and Germany took 16,000,000 bushels or about half as much in 1920 as during 1909-13. Imports into Canada and the Scandinavian countries show an increase over the prewar average. Imports into Denmark were 19,000,000 bushels in 1921 as compared with 11,000,000 bushels during the period 1909-13 or an increase of over 70 per cent.

PART IX

Farm Statistics for the Year Ending December 31, 1922, Collected by Township Assessors and Tabulated by the Iowa Weather and Crop Service

Better work by the assessors as a whole, through closer contact with the central office of the Iowa Weather and Crop Service in Des Moines made it possible to do 60 per cent more work by shifting only 13 per cent more money into miscellaneous clerk hire from other funds. Twenty-three more counties were handled direct from the assessors this year, leaving only 32 counties tabulated voluntarily by county auditors without compensation or authority of law.

A few hundred dollars more would complete the direct contact with the assessors, increase the accuracy of the statistics, and expedite their publication. It is expected that the published bulletin containing these statistics will be ready for distribution early in July, nearly 30 days earlier than last year. If all assessors reported direct instead of through county auditors, nearly 30 days more could be saved.

Total farms in Iowa in 1922, 213,021, are 1,075 less than last year, but this apparent decrease is due to a new ruling as to listing of township boundary line farms. Heretofore, township boundaries have been rigidly observed, with the result that a farm operated under one management but lying in two townships was reported as two farms, a portion being reported by each assessor. This year, as a rule, all land operated under one management was listed as one farm. This agrees with the method used by the government census, which found 213,439 farms including small areas producing $250 or requiring the continuous services of at least one person. The assessors enumerate only farms of 3 acres or more.

The total acres in farms reported by assessors was 33,528,154 which is 109,782 acres more than last year and 53,258 more than the last government census. This speaks well for the efficiency of the assessors. Some of the increase is no doubt due to the improvement of wild and rough lands. Allowing 547,000 acres for cities, towns and railroad right-of-way, there remains unaccounted for in Iowa 1,705,000 acres. This includes the larger rivers and flood plains along them, wooded areas not in farms, state parks, mines, quarries, lakes, sloughs, and exceedingly rough areas, none of which are within the deeded areas of farms.

Corn acreage, 10,364,163, is 139,176 acres larger than in 1921 and next to the largest of record. Oats acreage, 5,874,172, is 464,623 acres less than last year. Some of the more notable increases in acreages in addition to corn are as follows: Winter wheat, 199,971; tame hay, 175,923; barley, 28,909; rye for grain, 16,827; timothy seed, 35,907; and orchards, 9,629. Waste land in farms increased 13,908 acres, due mostly to overflow along the large boundary rivers. In seasons with no overflow this land is reported in crops or pasture.

Hog production has greatly increased. The hog population July 1, 1922, 11,766,526, is the greatest of record and 22 per cent more than the preceding year. The number January 1, 1923, was 9,461,637, which is 35 per cent more than on January 1, 1922. Sows bred for spring pigs, 1923, numbered 2,534,640, which is 11.4 per cent more than in 1922.

Cows and heifers kept for milk numbered 1,176,913, which is an increase of 4.8 per cent over last year. Other cattle amounted to 3,117,171, an increase of 8.6 per cent.

Increases are shown in poultry, eggs, and sheep shipped in for feeding. Marion county stands out conspicuously as a sheep-feeding county.

Horses continued to decrease at about the same rate as in the last five years, while mules show a decided slacking up in the rapid increases of recent years. A slight increase in tractors, trucks, and automobiles is shown; also modern homes. Silos and silage show decreases, though these might be expected to increase with the cows kept for milk.

Apples harvested amounted to 2,126,671 bushels, which is the largest crop since 1915; and there was a net increase of 9,629 acres in orchards, which probably marks the beginning of a reaction from the steady decline in orchards during the last 10 years.

TABLE NO. 1

Total number, average size, tenure and total acreage in farms; total acreage occupied by farm buildings, public highways and feed lots; acreage in crops not otherwise enumerated, and waste land; total bushels of apples harvested; also number of silos and tons of silage put up; total number of tractors, automobiles and auto trucks on farms; and modern homes, for the year 1922, all by counties.

Districts and Counties	Number of farms	Average size of farms (acres)	Tenure					Total acreage of farms	Total number of acres occupied by farm bldgs., public highways, feed lots	Number of bushels of apples harvested	Acreage in crops not otherwise enumerated	Acreage in waste land not utilized for any purpose	Number of silos on farms	Number of tons of silage put up	Number of tractors on farms	Number of automobiles on farms	Number of auto trucks on farms	Homes Modern		
			Owners	Relative renters	Renters	Both own and rent	Unclassified											Heat	Bath	Light
Northwest—																				
Buena Vista	2,080	171	883	303	784	80	30	356,290	20,702	4,702	394	887	315	25,489	406	2,079	267	407	276	335
Cherokee	1,859	191	667	360	723	81	28	355,662	19,974	8,271	653	1,731	232	20,960	333	1,874	266	245	199	275
Clay	1,805	185	758	262	692	78	15	334,631	18,848	2,131	400	1,432	260	24,202	428	1,790	90	303	170	307
Dickinson	1,117	198	368	66	610	58	15	221,038	10,566	5,912	388	2,099	129	11,637	177	1,003	54	94	58	67
Emmet	1,221	194	482	74	617	41	7	237,147	12,340	4,920	777	3,300	267	20,472	211	1,096	50	94	43	77
Lyon	1,775	200	576	410	717	59	13	355,352	19,174	3,220	383	1,064	76	5,879	348	1,810	105	235	129	241
O'Brien	1,925	184	714	382	737	72	20	354,172	19,803	5,160	421	450	158	15,764	469	1,992	144	335	232	383
Osceola	1,255	196	405	122	683	25	20	245,980	12,363	4,516	460	1,105	103	6,673	254	1,235	41	83	47	118
Palo Alto	1,886	179	758	203	793	105	27	336,764	17,103	5,378	1,242	3,917	167	14,242	230	1,546	58	115	88	82
Plymouth	2,740	191	1,077	582	884	172	25	523,638	27,184	11,074	1,975	1,538	162	14,890	513	2,790	660	420	248	316
Pocahontas	1,999	176	793	248	842	80	36	351,513	18,356	1,393	552	1,616	127	11,709	474	1,956	169	259	170	179
Sioux	2,830	167	1,026	598	1,078	100	28	473,051	24,170	3,407	423	330	326	32,220	432	2,721	172	418	250	410
For District	22,492	186	8,507	3,610	9,160	951	264	4,145,238	220,583	60,084	8,068	19,469	2,322	204,137	4,275	21,892	2,076	3,008	1,910	2,790
North Central—																				
Butler	2,214	159	880	306	880	97	51	351,262	19,525	4,140	1,390	2,445	407	32,562	278	1,906	45	190	106	177
Cerro Gordo	1,946	173	826	213	773	105	29	336,178	17,804	6,403	1,190	4,014	506	49,305	296	1,623	71	387	205	319
Floyd	1,913	157	901	290	606	83	33	299,891	14,835	7,474	2,612	2,293	500	40,234	214	1,503	27	287	172	133
Franklin	2,028	175	849	293	805	75	6	354,953	19,726	8,024	880	1,188	434	43,415	311	1,961	44	355	195	227
Hancock	1,948	183	823	291	718	84	32	356,463	18,665	5,240	4,563	4,635	337	32,345	336	1,666	31	271	150	190
Humboldt	1,425	186	652	188	486	61	38	265,087	15,244	5,886	856	1,616	301	30,147	385	1,431	73	208	125	152
Kossuth	3,042	196	1,327	300	1,202	162	51	597,624	30,298	10,893	1,878	5,976	647	56,818	700	2,931	155	408	270	328
Mitchell	1,707	165	924	275	396	95	17	281,289	15,028	1,584	2,248	2,016	554	57,360	219	1,369	54	317	211	211
Winnebago	1,613	154	789	252	499	62	11	248,783	15,038	4,115	1,055	4,732	284	23,612	206	1,456	70	267	90	86
Worth	1,486	164	739	267	388	73	19	243,527	13,643	2,593	637	2,213	260	24,272	260	1,340	55	219	108	94
Wright	1,876	188	761	231	815	61	8	352,293	18,937	4,627	2,039	2,503	183	15,397	395	1,743	148	234	176	191
For District	21,198	173	9,471	2,906	7,568	958	295	3,687,350	198,743	60,979	19,348	33,631	4,413	405,467	3,600	18,929	773	3,143	1,808	2,108

Northeast—																				
Allamakee......	2,410	164	1,838	200	223	114	35	395,661	10,873	7,403	1,107	72,076	421	29,549	155	1,732	51	424	167	285
Black Hawk....	2,275	147	1,183	300	671	95	26	333,413	16,776	16,773	1,734	1,786	829	68,931	336	1,908	119	482	235	340
Bremer........	1,975	132	1,189	237	462	79	8	260,541	12,659	7,422	821	1,685	646	51,633	301	1,737	78	299	141	231
Buchanan......	2,329	148	1,227	262	715	91	34	345,304	16,993	9,411	598	1,739	481	43,825	211	1,806	67	262	167	166
*Chickasaw.....	1,967	148	1,118	221	559	48	21	292,402	13,496	1,810	285	2,476	416	37,604	103	1,520	29	167	83	113
Clayton........	3,063	149	2,081	411	460	86	25	455,927	17,615	31,814	1,633	22,449	568	40,422	431	2,571	105	775	375	586
Delaware.......	2,220	154	1,191	265	617	84	63	342,175	15,508	12,452	908	4,080	709	53,428	204	2,011	54	373	196	304
Dubuque.......	2,462	147	1,862	215	296	86	3	362,152	10,725	27,904	1,286	8,926	238	19,203	196	1,919	120	547	219	408
Fayette........	3,123	139	1,854	314	830	91	34	434,997	20,186	11,081	970	4,593	843	63,820	240	2,400	47	554	256	419
Howard........	1,772	163	918	123	593	101	37	288,781	13,137	2,371	1,010	5,683	394	30,609	133	1,266	38	260	52	79
Winneshiek.....	2,880	147	1,928	389	356	187	20	424,263	19,446	9,770	817	10,818	477	39,407	232	2,548	105	616	239	403
For District....	26,476	149	16,389	2,937	5,782	1,062	306	3,935,616	167,414	138,211	11,169	136,311	6,022	478,431	2,542	21,418	813	4,759	2,130	3,334
West Central—																				
Audubon.......	1,761	156	898	243	520	81	19	275,347	14,243	13,782	646	1,794	162	11,501	111	1,700	205	204	177	205
Calhoun.......	1,980	176	682	427	744	107	20	348,293	17,604	3,938	547	1,262	69	6,324	379	1,912	87	310	219	188
Carroll.........	2,132	163	992	524	507	73	36	347,245	19,410	5,689	451	1,659	104	10,754	363	2,208	191	271	192	315
Crawford......	2,607	170	1,197	377	824	154	55	443,322	23,197	8,290	820	3,164	101	10,475	293	2,378	236	303	232	287
Greene.........	1,973	173	759	275	833	94	12	340,804	15,494	6,105	647	1,700	80	6,005	340	1,877	58	332	218	229
Guthrie........	2,333	157	1,247	288	657	109	32	366,619	16,608	29,139	1,356	3,738	88	5,004	194	1,781	193	281	256	272
Harrison.......	2,777	148	1,423	354	832	120	48	410,675	18,065	79,804	1,942	11,997	82	7,041	338	2,049	125	144	118	153
Ida............	1,510	181	605	304	540	33	28	273,885	14,881	4,769	692	627	65	5,525	250	1,484	199	245	216	290
Monona........	2,185	174	936	286	813	111	39	390,670	16,179	19,824	2,325	9,745	66	5,135	382	1,875	85	155	116	135
Sac............	1,976	180	820	416	645	76	19	355,690	20,388	4,644	387	1,247	150	14,929	330	1,976	254	417	368	459
Shelby.........	2,117	171	1,037	415	587	64	14	362,995	17,354	24,015	1,253	2,132	89	7,345	243	2,251	214	372	312	333
Woodbury.....	2,780	175	1,199	376	1,065	120	20	487,668	22,926	18,853	4,328	7,250	234	19,403	271	2,314	245	212	181	239
For District....	26,131	170	11,795	4,285	8,567	1,142	342	4,403,213	216,349	218,852	15,394	46,315	1,290	109,441	3,494	23,805	2,092	3,246	2,605	3,105

*Partly estimated.

TABLE NO. 1—Continued

Districts and Counties	Number of farms	Average size of farms (acres)	Tenure					Total acreage of farms	Total number of acres occupied by farm bldgs., public highways, feed lots	Number of bushels of apples harvested	Acreage in crops not otherwise enumerated	Acreage in waste land not utilized for any purpose	Number of silos on farms	Number of tons of silage put up	Number of tractors on farms	Number of automobiles on farms	Number of auto trucks on farms	Homes Modern		
			Owners	Relative renters	Renters	Both own and rent	Unclassified											Heat	Bath	Light
Central—																				
Boone.........	2,437	141	1,107	441	685	178	26	343,709	16,270	15,838	887	3,632	235	11,890	419	2,217	136	361	284	430
Dallas.........	2,322	155	1,090	412	612	178	30	358,814	17,469	39,520	1,395	3,284	275	20,569	476	2,001	255	391	306	370
Grundy........	1,720	180	614	471	542	62	31	309,488	16,179	5,755	276	128	308	27,125	354	1,706	155	427	320	461
Hamilton......	2,183	162	978	304	729	124	48	354,565	17,342	8,780	564	2,002	285	22,929	479	2,122	207	368	244	477
Hardin........	2,068	164	902	334	669	95	68	338,922	18,026	19,333	480	1,756	359	37,318	339	1,924	43	318	234	277
Jasper.........	2,950	152	1,577	410	723	192	48	447,413	21,627	28,097	1,138	3,847	383	23,653	258	2,246	148	529	350	361
Marshall.......	2,301	151	1,181	404	611	78	27	347,121	19,527	25,365	1,134	1,304	408	32,936	436	2,140	124	574	400	545
Polk...........	2,810	116	1,518	217	879	151	45	324,578	14,461	121,846	5,523	5,460	226	15,099	391	1,875	249	454	287	448
Poweshiek......	2,196	163	1,150	243	577	198	28	357,040	13,117	22,364	1,211	2,046	322	23,363	252	1,912	184	502	310	313
Story..........	2,301	150	1,037	316	836	90	22	346,125	17,058	4,748	486	1,091	416	29,240	336	1,927	130	370	282	417
Tama..........	2,696	163	1,455	385	693	143	20	439,386	20,468	41,557	1,547	6,030	433	43,619	457	2,410	229	563	321	359
Webster.......	2,510	168	1,024	367	857	168	94	421,348	18,916	8,022	819	6,418	212	13,258	723	2,247	117	367	214	332
For District....	28,494	155	13,633	4,304	8,413	1,657	487	4,388,509	210,460	341,225	15,460	36,998	3,862	300,999	4,920	24,727	1,977	5,224	3,552	4,790
East Central—																				
Benton........	2,439	180	1,120	484	655	169	11	438,501	22,236	37,979	1,270	1,073	571	45,083	454	2,314	264	538	380	454
Cedar.........	2,336	150	1,339	353	546	83	15	351,463	16,030	23,137	914	4,657	266	20,094	281	2,125	70	747	425	583
Clinton........	2,750	150	1,601	365	659	85	40	413,732	18,440	11,708	876	2,190	388	31,786	371	2,484	97	586	334	531
Iowa..........	2,284	157	1,377	249	517	126	15	357,730	14,917	30,901	1,230	7,943	433	29,953	318	2,095	277	550	308	387
Jackson........	2,520	155	1,918	242	289	53	18	390,563	10,799	28,554	1,128	9,512	338	32,280	133	1,860	91	272	120	238
Johnson........	2,521	143	1,660	333	419	89	20	359,992	13,789	35,561	1,933	4,918	395	24,018	396	2,245	229	644	425	559
Jones..........	2,222	150	1,404	211	541	36	30	333,639	10,516	29,102	680	3,274	472	46,099	203	1,797	55	375	221	336
Linn...........	3,480	121	1,975	455	806	194	50	420,145	17,007	45.931	2,853	4,836	678	48,599	210	2,709	164	652	381	579
*Muscatine......	1,674	145	886	205	492	70	21	242,108	9,841	21,398	5,067	2,632	308	28,130	272	1,466	115	374	207	347
Scott..........	2,195	123	1,159	467	482	74	13	271,047	10,767	30,079	2,337	2,687	344	28,156	293	2,238	286	908	385	783
For District....	24,421	147	14,439	3,364	5,406	979	233	3,578,920	144,342	294,350	19,228	43,722	4,193	334,198	2,931	21,333	1,648	5,646	3,186	4,797

outhwest—																				
Adair	2,119	163	1,014	244	731	92	38	344,811	16,068	23,370	1,112	806	158	11,744	111	1,860	133	179	143	154
Adams	1,643	160	930	151	456	85	21	262,156	11,847	30,288	911	820	136	10,218	84	1,348	94	126	102	111
*Cass	2,162	161	1,006	328	641	151	36	347,240	16,457	17,896	1,350	2,773	157	13,932	218	1,846	239	299	296	340
Fremont	1,929	152	1,060	249	518	81	21	293,095	12,619	48,996	1,832	10,323	77	2,950	140	1,971	172	209	201	248
Mills	1,667	154	829	178	540	94	26	256,051	11,740	20,892	1,330	6,062	47	4,243	207	1,444	105	231	191	264
Montgomery	1,569	162	772	293	389	104	11	254,143	11,959	21,500	1,149	1,348	107	8,157	176	1,637	196	245	198	179
Page	2,128	162	1,089	344	482	210	3	325,296	14,214	22,158	1,871	2,217	59	4.612	242	1,923	183	353	304	243
Pottawattamie	3,292	161	1,518	597	930	206	41	531,574	25,999	31,097	2,283	6,159	128	11,884	407	3,114	515	392	341	400
Taylor	2,164	147	1,226	162	605	106	65	318,358	15,050	27,829	985	2,768	177	8,656	125	1,604	59	150	145	199
For District	18,673	158	9,444	2,546	5,292	1,129	262	2,932,724	135,953	244,026	12,823	33,276	1,046	76,396	1,710	16,747	1,696	2,184	1,921	2,138
South Central—																				
Appanoose	2,171	145	1,594	100	375	73	29	290,561	11,035	34,282	1,975	4,171	66	4,862	62	1,277	32	80	61	62
Clarke	1,519	169	783	170	434	77	55	255,998	10,127	16,719	749	4,492	134	6,518	102	1,096	33	83	68	84
Decatur	2,200	150	1,429	100	581	57	33	330,616	12,287	23,980	1,631	7,029	64	5,138	77	1,208	29	64	44	43
Lucas	1,659	156	968	219	312	146	14	258,463	9,267	26,328	920	2,500	239	13,717	122	1,224	46	139	122	196
Madison	2,239	149	1,315	244	540	98	42	332,833	15,716	63.077	1,386	4,309	248	17,826	193	1,728	153	196	159	211
Marion	2,280	148	1,305	245	560	125	45	337,952	12,415	12,527	813	5,785	251	21,609	184	1,853	48	140	118	159
Monroe	1,817	140	1,241	84	363	107	22	253,793	9,968	30,788	936	2,582	127	7,415	69	969	89	58	39	50
Ringgold	1,894	165	1,130	221	435	74	34	313,449	12,257	22,121	918	852	181	9,746	91	1,428	22	96	70	84
Union	1,613	161	888	148	490	61	26	259,567	11,259	29,892	1,650	2,074	149	10,370	82	1,215	40	139	95	126
Warren	2,370	141	1,438	203	571	125	33	335,265	13,170	70,410	1,781	4,198	289	20,534	194	1,575	105	160	139	191
Wayne	1,827	169	1,091	202	349	127	58	308,661	12,515	10,615	863	1,581	70	2,590	74	1,292	65	120	86	99
For District	21,589	154	13,182	1,936	5,010	1,070	391	3,277,158	130,016	340,739	13,622	39,573	1,818	120,325	1,250	14,865	662	1,275	1,001	1,305
Southeast—																				
Davis	2,102	145	1,510	148	297	121	26	305,039	10,174	17,540	1,280	4,770	51	2,326	83	1,490	56	116	70	121
Des Moines	1,927	123	1,278	192	342	66	49	236,918	8,030	64,876	2,225	8,758	159	10,539	213	1,485	82	321	205	457
*Henry	1,871	137	1,047	253	432	129	10	256,970	9,637	25,766	1,227	3,768	138	7,508	236	1,612	72	343	277	368
Jefferson	1,883	137	1,174	180	411	92	26	258,511	9,161	34,845	1,194	1,197	139	7,432	136	1,499	41	234	161	216
Keokuk	2,702	132	1,789	317	425	105	66	355,414	15,878	39,065	1,697	6,415	234	13,830	228	2.134	84	369	314	424
*Lee	2,334	132	1,631	195	411	61	36	308,612	10,054	54,415	4,420	5,743	283	16,504	154	1,612	83	325	135	234
Louisa	1,377	163	796	172	294	89	26	224,274	6,743	27,330	3,990	3,715	200	17,160	275	1,171	68	275	188	239
Mahaska	2,929	120	1,653	353	716	169	38	351,226	13,974	46,488	2,620	6,670	239	12,775	265	2,259	139	463	283	436
Van Buren	2,071	141	1,468	168	315	101	19	292,896	8,122	30,707	1,612	1,030	151	8,119	87	1,468	62	159	95	119
Wapello	2,052	124	1,254	197	480	102	19	253,553	9,882	47,290	2,164	5,347	142	7,037	138	1,285	112	212	139	197
Washington	2,299	146	1,422	313	435	107	22	336,013	14,437	39,883	1,653	3,766	174	11,289	339	2,056	136	505	422	519
For District	23,547	136	15,022	2,488	4,558	1,142	337	3,179,426	116,092	428,205	24,082	51,179	1,910	114,519	2,154	18,071	935	3,322	2,289	3,330
For State	213,021	157	111,882	28,376	59,756	10,090	2,917	33,528,154	1,539,952	2,126,671	139,194	440.474	26.876	2,143,913	26,876	181,787	12,672	31,807	20,402	27,697

*Partly estimated.

TABLE NO. 2.

Acreage, average bushels per acre and total yield of corn, oats, winter wheat, spring wheat and barley, for the year 1922, all by counties

Districts and Counties	Corn			Oats			Winter Wheat			Spring Wheat			Barley		
	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushe's per acre	Total bushels
Northwest—															
Buena Vista	139,486	44	6,137,384	98,452	40	3,938,080	45	20	900	19	18	342	549	33	18,117
Cherokee	131,160	42	5,508,720	84,524	33	2,789,292	17	20	340	105	14	1,470	1,058	31	32,798
Clay	119,799	41	4,911,759	87,835	36	3,162,060	10	20	200	91	17	1,547	1,428	27	38,556
Dickinson	74,462	34	3,531,708	55,529	31	1,721,399	94	15	1,410	232	12	2,784	1,672	28	46,816
Emmet	81,925	34	2,785,450	64,393	37	2,382,541	16	20	320	52	14	728	821	35	28,735
Lyon	132,240	43	5,686,320	110,387	35	3,863,545	78	20	1,560	306	14	4,284	2,914	27	78,678
O'Brien	132,959	40	5,318,360	92,265	37	3,413,805	10	20	200	125	15	1,875	4,597	33	151,701
Osceola	88,183	40	3,527,320	75,908	34	2,580,872	4	20	80	16	14	224	1,077	27	29,079
Palo Alto	119,404	43	5,134,372	93,382	34	3,174,988	10	20	200	....	......	....	654	28	18,312
Plymouth	194,071	42	8,150,982	111,606	31	3,459,786	2,692	22	59,224	11,475	14	160,650	6,178	30	185,340
Pocahontas	137,400	45	6,183,000	111,382	37	4,121,134	60	20	1.200	20	20	400	265	30	7,950
Sioux	185,916	45	8,366,220	126,628	35	4,431,980	1,394	19	26,486	2,645	16	42,320	8,694	29	252,126
For District	1,537,005	41	64,241,595	1,112,291	35	39,039,482	4,430	20	92,120	15,086	14	216,624	29,907	30	888,208
North Central—															
Butler	108,896	42	4,573,632	81,787	38	3,107,906	16	20	320	56	17	952	454	30	13,620
Cerro Gordo	107,329	45	4,829,805	79,125	41	3,244,125	17	18	306	56	15	840	1,430	29	41,470
Floyd	89,306	36	3,215,016	74,925	40	2,997,000	41	21	861	71	15	1,065	761	29	22,069
Franklin	123,911	48	5,947,728	88,180	42	3,703,560	17	10	170	97	17	1,649	674	34	22,916
Hancock	116,486	44	5,125,384	93,920	32	3,005,440	40	17	680	425	16	6,800	1,086	27	29,322
Humboldt	102,058	47	4,796,726	76,760	36	2,763,360	36	17	612	56	20	1,120	924	27	24,948
Kossuth	205,971	43	8,856,753	168,258	39	6,562,062	60	16	960	58	17	986	1,165	32	37,280
Mitchell	74,862	41	3,069,342	74,097	41	3,037,977	98	17	1,666	108	20	2,160	709	26	18,434
Winnebago	76,845	42	3,227,490	58,771	38	2,233,298	2	17	34	283	16	4,528	2,038	27	55,026
Worth	64,815	42	2,722,230	61,968	39	2,416,752	184	16	2,944	510	15	7,650	1,294	27	34,938
Wright	128,897	43	5,542,571	97,972	40	3,918,880	23	17	391	120	20	2,400	1,402	32	44,864
For District	1,199,376	43	51,906,677	955,763	39	36,990,360	534	17	8,944	1,840	17	30,150	11,937	29	344,887

Northeast—															
Allamakee	47,298	55	2,601,390	37,718	41	1,546,438	1,239	18	22,302	502	20	10,040	2,055	32	65,760
Black Hawk	103,602	47	4,869,294	66,622	39	2,598,258	460	20	9,200	90	20	1,800	1,915	27	51,705
Bremer	70,247	45	3,161,115	57,289	44	2,520,716	97	24	2,328	71	14	994	277	32	8,864
Buchanan	103,331	45	4,649,895	66,392	32	2,124,544	119	21	2,499	101	17	1,717	515	25	12,875
*Chickasaw	72,335	40	2,893,400	62,053	42	2,606,226	106	21	2,226	139	12	1,668	317	35	11,095
Clayton	80,419	52	4,181,788	67,637	44	2,976,028	1,619	26	42,094	460	18	8,280	2,707	32	86,624
Delaware	91,277	40	3,651,080	60,658	34	2,062,372	61	12	732	67	14	938	1,031	28	28,868
Dubuque	68,469	47	3,218,043	49,927	41	2,047,007	468	20	9,360	521	20	10,420	817	28	22,876
Fayette	99,359	49	4,868,591	76,506	39	2,983,734	472	20	9,440	203	18	3,654	1,653	35	57,855
Howard	61,375	39	2,393,625	59,710	40	2,388,400	161	16	2,576	93	12	1,116	1,250	32	40,000
Winneshiek	86,609	42	3,637,578	74,398	41	3,050,318	1,015	25	25,375	884	17	15,028	5,586	32	178,752
For District	884,321	46	40,125,799	678,910	40	26,904,041	5,817	21	128,132	3,131	17	55,655	18,123	30	565,274
West Central—															
Audubon	91,422	43	3,931,146	44,650	28	1,250,200	2,547	25	63,675	515	13	6,695	7,396	30	221,880
Calhoun	141,716	49	6,944,084	114,588	38	4,354,344	103	24	2,472	25	14	350	373	28	10,444
Carroll	126,583	45	5,696,235	75,245	33	2,483,085	1,202	23	27,646	1,450	12	17,400	2,573	29	74,617
Crawford	145,535	38	5,530,330	71,476	28	2,001,328	4,982	28	139,496	4,243	15	63,645	4,333	28	121,324
Greene	144,381	50	7,219,050	82,185	39	3,205,215	433	17	7,361	31	18	558	208	28	5,824
Guthrie	113,296	44	4,985,024	56,599	37	2,094,163	4,088	23	94,024	227	12	2,724	1,734	29	50,286
Harrison	164,804	46	7,580,984	39,295	28	1,100,260	32,123	22	706,706	8,132	14	113,848	2,012	23	46,276
Ida	101,820	39	3,970,980	60,194	32	1,926,208	93	22	2,046	178	12	2,136	2,946	28	82,488
Monona	149,999	38	5,699,962	39,953	28	1,118,684	36,268	21	761,628	4,631	12	55,572	1,797	29	52,113
Sac	134,498	48	6,455,904	82,861	35	2,900,135	174	22	3,828	52	19	988	3,282	31	101,742
Shelby	131,539	41	5,393,099	59,238	29	1,717,902	3,470	29	100,630	1,411	14	19,754	7,539	26	196,014
Woodbury	198,896	32	6,364,672	75,916	25	1,897,900	13,712	27	370,224	2,332	12	27,984	2,318	28	64,904
For District	1,644,489	43	69,771,470	802,200	32	26,049,424	99,195	24	2,279,736	23,227	14	311,654	36,511	28	1,027,912

*Partly estimated

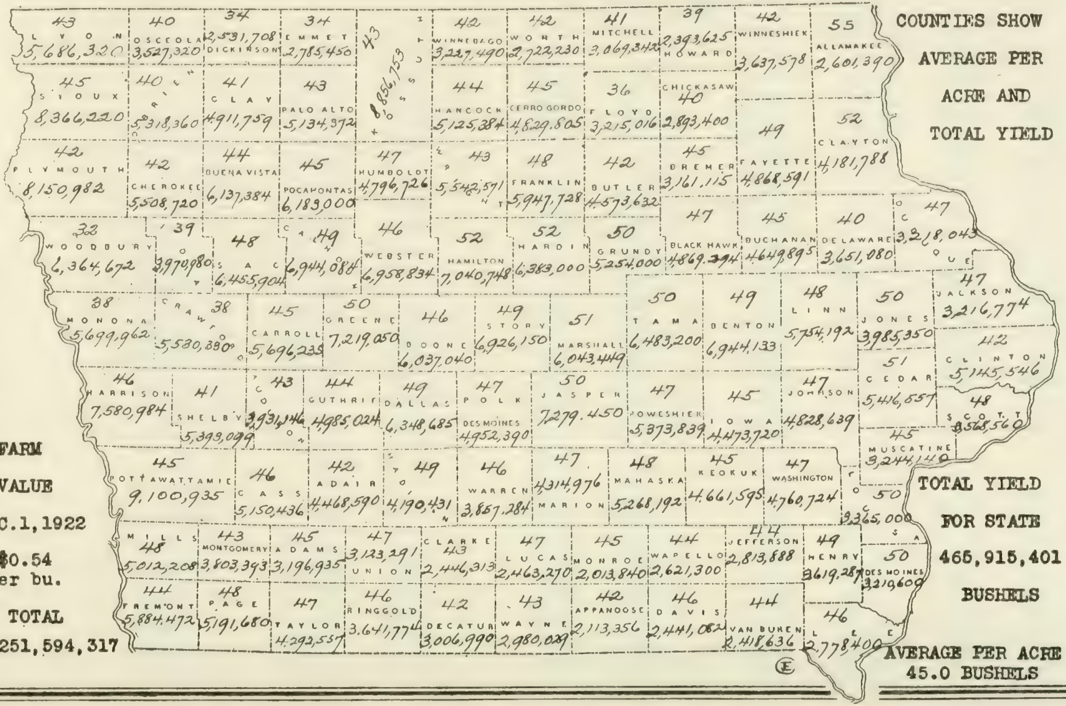
TABLE NO. 2—Continued

Districts and Counties	Corn			Oats			Winter Wheat			Spring Wheat			Barley		
	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels
Central—															
Boone	131,240	46	6,037,040	84,136	37	3,113,032	1,727	21	36,267	184	18	3,312	509	29	14,761
Dallas	129,565	49	6,348,685	65,695	38	2,496,410	17,563	24	421,512	157	18	2,826	1,239	31	38,409
Grundy	105,080	50	5,254,000	79,795	43	3,431,185	426	22	9,372	28	21	588	1,050	37	38,850
Hamilton	135,399	52	7,040,748	102,728	42	4,314,576	441	22	9,702	80	18	1,440	633	31	19,623
Hardin	122,750	52	6,383,000	84,197	46	3,873,062	147	25	3,675	68	16	1,088	525	39	20,475
Jasper	145,589	50	7,279,450	65,352	39	2,548,728	10,684	27	288,468	881	15	13,215	185	31	5,735
Marshall	118,499	51	6,043,449	67,301	45	3,028,545	2,626	23	60,398	284	20	5,680	380	39	14,820
Polk	105,370	47	4,952,390	47,639	40	1,905,560	30,060	25	751,500	1,729	12	20,748	186	29	5,394
Poweshiek	114,337	47	5,373,839	52,379	39	2,042,781	1,176	21	24,696	350	14	4,900	514	28	14,392
Story	141,350	49	6,926,150	85,715	42	3,600,030	1,735	25	43,375	15	16	240	266	26	6,916
Tama	129,664	50	6,483,200	76,653	39	2,989,467	1,986	31	61,566	903	16	14,448	2,381	31	73,811
Webster	151,279	46	6,958,834	128,304	39	5,003,856	369	23	8,487	356	17	6,052	625	29	18,121
For District	1,530,122	49	75,080,785	939,894	41	38,347,232	68,940	24	1,719,018	5,035	17	74,537	8,493	32	271,307
East Central—															
Benton	141,717	49	6,944,133	93,311	42	3,919,062	1,620	23	37,260	268	19	5,092	4,299	27	116,073
Cedar	106,207	51	5,416,557	49,053	47	2,305,491	4,232	27	114,264	195	20	3,900	4,304	28	120,512
Clinton	122,513	42	5,145,546	50,989	37	1,886,593	4,557	23	104,811	529	15	7,935	3,914	24	93,936
Iowa	99,416	45	4,473,720	42,952	41	1,761,032	2,715	24	65,160	260	18	4,680	885	24	21,240
Jackson	68,442	47	3,216,774	33,211	41	1,361,652	1,414	16	22,624	557	13	7,241	495	26	12,870
Johnson	102,737	47	4,828,639	47,272	42	1,985,424	2,248	24	53,952	178	16	2,848	660	29	19,140
Jones	79,707	50	3,985,350	38,948	39	1,518,972	273	23	6,279	209	17	3,553	1,019	34	34,646
Linn	119,879	48	5,754,192	67,624	39	2,637,336	871	23	20,033	207	18	3,726	808	30	24,240
*Muscatine	72,092	45	3,244,140	27,254	40	1,090,160	8,739	22	192,258	258	15	3,870	1,348	24	32,352
Scott	74,345	48	3,568,560	31,413	41	1,287,933	18,926	26	492,076	560	16	4,160	9,058	25	226,450
For District	987,055	47	46,577,611	482,027	41	19,753,655	45,595	23	1,108,717	3,221	17	47,005	26,790	27	701,459

Southwest—															
Adair	106,395	42	4,468,590	44,968	35	1,573,880	7,118	23	163,714	79	16	1,264	3,845	29	111,505
Adams	71,043	45	3,196,935	28,652	34	974,168	9,453	22	207,966	28	17	476	820	27	22,140
*Cass	111,966	46	5,150,436	44,610	35	1,561,350	24,945	21	523,845	248	14	3,472	6,831	27	184,437
Fremont	133,738	44	5,884,472	13,283	28	371,924	25,618	23	589,214	77	16	1,232	235	26	6,110
Mills	104,421	48	5,012,208	19,354	31	599,974	22,550	20	451,000	507	12	6,084	472	26	12,272
Montgomery	88,451	43	3,803,393	22,390	32	716,480	28,764	22	632,808	145	12	1,740	860	27	23,220
Page	108,160	48	5,191,680	22,335	33	737,055	37,630	25	940,750	91	12	1,092	418	31	12,958
Pottawattamie	202,243	45	9,100,935	56,118	30	1,683,540	33,864	22	745,008	976	16	15,616	10,853	27	293,031
Taylor	91,331	47	4,292,557	31,354	35	1,097,390	19,653	24	471,672	8	14	112	314	27	8,478
For District	1,017,748	45	46,101,206	283,064	33	9,315,761	209,595	23	4,725,977	2,159	14	31,088	24,648	27	674,151
South Central—															
Appanoose	50,318	42	2,113,356	17,970	28	503,160	6,990	15	104,850	23	14	322	8	28	224
Clarke	56,891	43	2,446,313	24,483	36	881,388	8,451	17	143,667	....	......	....	77	29	2,233
Decatur	71,595	42	3,006,990	27,054	29	784,566	13,686	19	260,034	57	12	684	90	20	1,800
Lucas	52,410	47	2,463,270	22,557	28	631,596	8,858	18	159,444	21	15	315	42	28	1,176
Madison	85,519	49	4,190,431	32,954	35	1,153,390	19,573	26	508,898	123	16	1,968	1,119	29	32,451
Marion	91,808	47	4,314,976	35,228	35	1,232,980	19,370	25	484,250	1,112	14	15,568	392	25	9,800
Monroe	44,752	45	2,013,840	14,890	29	431,810	9,080	20	181,600	197	13	2,561	76	28	2,128
Ringgold	79,169	46	3,641,774	33,078	33	1,091,574	6,812	24	163,488	36	14	504	77	27	2,079
Union	66,453	47	3,123,291	28,797	37	1,065,489	4,269	24	102,456	17	18	306	658	29	19,082
Warren	83,854	46	3,857,284	31,500	36	1,134,000	32,800	23	754,400	410	14	5,740	465	35	16,275
Wayne	69,303	43	2,980,029	30,240	32	967,680	7,298	18	131,364	6	10	60	24	28	672
For District	752,072	45	34,151,554	298,751	33	9,877,633	137,187	21	2,994,451	2,022	16	28,028	3,028	28	87,920
Southeast—															
Davis	53,067	46	2,441,082	19,624	29	569,096	5,484	22	120,648	24	18	432	29	28	812
Des Moines	64,212	50	3,210,600	24,364	36	877,104	12,558	28	351,624	48	18	864	207	35	7,245
*Henry	73,863	49	3,619,287	31,545	38	1,198,710	6,384	27	172,368	1	25	25	128	26	3,328
Jefferson	63,952	44	2,813,888	27,819	30	834,570	6,519	20	130,380	23	20	460	113	26	2,938
Keokuk	103,591	45	4,661,595	42,222	38	1,604,436	4,368	26	113,568	359	15	5,385	359	21	7,539
*Lee	60,400	46	2,778,400	19,824	35	693,840	17,895	26	465,270	100	22	2,200	166	26	4,316
Louisa	67,300	50	3,365,000	23,793	41	975,513	15,402	26	400,452	58	23	1,334	86	26	2,236
Mahaska	109,754	48	5,268,192	46,210	38	1,755,980	7,274	26	189,124	331	19	6,289	226	31	7,006
Van Buren	54,969	44	2,418,636	19,224	29	557,496	7,922	23	182,206	....	......	....	109	27	2,943
Wapello	59,575	44	2,621,300	21,193	32	678,176	15,134	24	363,216	60	15	900	23	21	483
Washington	101,292	47	4,760,724	45,454	40	1,818,160	3,570	21	74,970	129	14	1,806	117	31	3,627
For District	811,975	47	37,958,704	321,272	35	11,463,081	102,510	24	2,563,826	1,133	19	19,695	1,563	27	42,473
For State	10,364,163	45.0	465,915,401	5,874,172	37.1	217,840,669	673,803	23.3	15,620,921	56,834	14.3	814,436	161,000	28.6	4,603,591

*Partly estimated.

CORN (1922)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OSCEOLA 40 3,527,320
DICKINSON 34 2,531,708
EMMET 34 2,785,450
KOSSUTH 43 8,856,753
WINNEBAGO 42 3,227,490
WORTH 42 2,722,230
MITCHELL 41 3,069,342
HOWARD 39 2,393,625
WINNESHIEK 42 3,637,578
ALLAMAKEE 55 2,601,390
SIOUX 45 8,366,220
O'BRIEN 40 5,318,360
CLAY 41 4,911,759
PALO ALTO 43 5,134,372
HANCOCK 44 5,125,384
CERRO GORDO 45 4,829,805
FLOYD 36 3,215,016
CHICKASAW 40 2,893,400
FAYETTE 49 4,868,591
CLAYTON 52 4,181,788
PLYMOUTH 42 8,150,982
CHEROKEE 42 5,508,720
BUENA VISTA 44 6,137,384
POCAHONTAS 45 6,183,000
HUMBOLDT 47 4,796,726
WRIGHT 43 5,542,571
FRANKLIN 48 5,947,728
BUTLER 42 4,573,632
BREMER 45 3,161,115
BUCHANAN 45 4,649,895
DELAWARE 40 3,651,080
DUBUQUE 47 3,218,043
WOODBURY 32 6,364,672
IDA 39 3,970,980
SAC 48 6,455,904
CALHOUN 49 6,944,084
WEBSTER 46 6,958,834
HAMILTON 52 7,040,748
HARDIN 52 6,383,000
GRUNDY 50 5,254,000
BLACK HAWK 47 4,869.294
MONONA 38 5,699,962
CRAWFORD 38 5,530,380
CARROLL 45 5,696,235
GREENE 50 7,219,050
BOONE 46 6,037,040
STORY 49 6,926,150
MARSHALL 51 6,043,449
TAMA 50 6,483,200
BENTON 49 6,944,133
LINN 48 5,754,192
JONES 50 3,985,350
JACKSON 47 3,216,774
CLINTON 42 5,145,546
HARRISON 46 7,580,984
SHELBY 41 5,393,099
AUDUBON 43 3,931,146
GUTHRIE 44 4,985,024
DALLAS 49 6,348,685
POLK 47 DES MOINES 4,952,390
JASPER 50 7,279.450
POWESHIEK 47 5,373,839
IOWA 45 4,473,720
JOHNSON 47 4,828,639
CEDAR 51 5,416,557
SCOTT 48 3,568,560
MUSCATINE 45 3,244,140
POTTAWATTAMIE 45 9,100,935
CASS 46 5,150,436
ADAIR 42 4,468,590
MADISON 49 4,190,431
WARREN 46 3,857,284
MARION 47 4,314,976
MAHASKA 48 5,268,192
KEOKUK 45 4,661,595
WASHINGTON 47 4,760,724
LOUISA 50 3,365,000
MILLS 48 5,012,208
MONTGOMERY 43 3,803,393
ADAMS 45 3,196,935
UNION 47 3,123,291
CLARKE 43 2,446,313
LUCAS 47 2,463,270
MONROE 45 2,013,840
WAPELLO 44 2,621,300
JEFFERSON 44 2,813,888
HENRY 49 3,619,287
DES MOINES 50 3,219,600
FREMONT 44 5,884,472
PAGE 48 5,191,680
TAYLOR 47 4,292,557
RINGGOLD 46 3,641,774
DECATUR 42 3,006,990
WAYNE 43 2,980,029
APPANOOSE 42 2,113,356
DAVIS 46 2,441,082
VAN BUREN 44 2,418,636
LEE 46 2,778,400
E

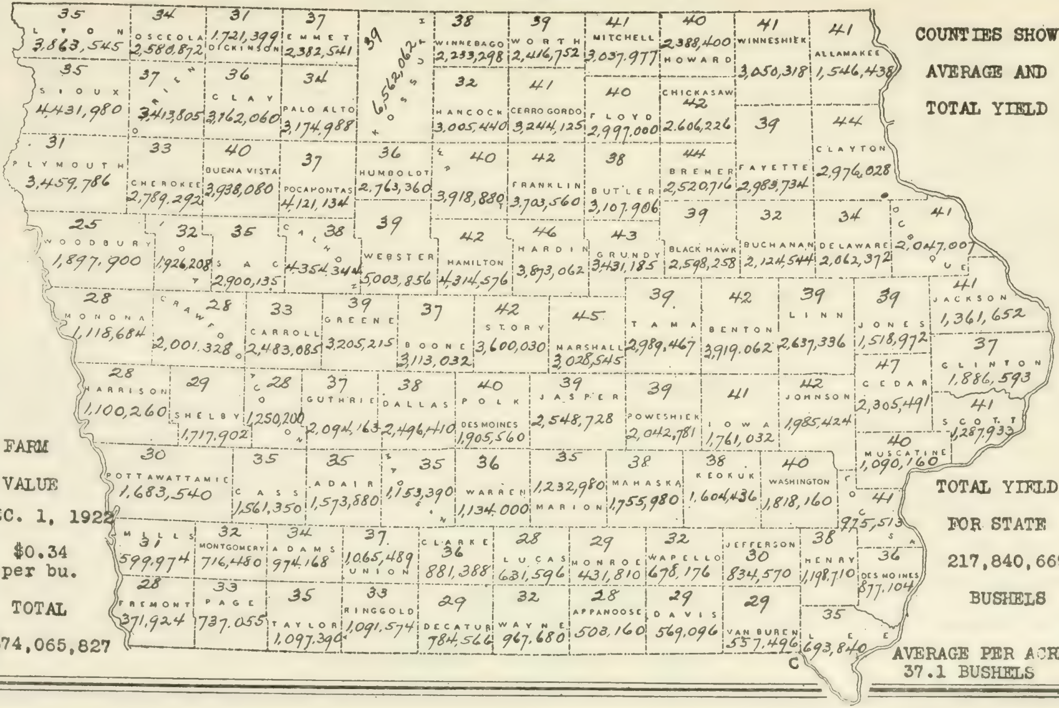
COUNTIES SHOW
AVERAGE PER
ACRE AND
TOTAL YIELD

TOTAL YIELD
FOR STATE
465,915,401
BUSHELS

AVERAGE PER ACRE
45.0 BUSHELS

FARM
VALUE
DEC.1,1922
$0.54
per bu.
TOTAL
$251,594,317

OATS (1922)

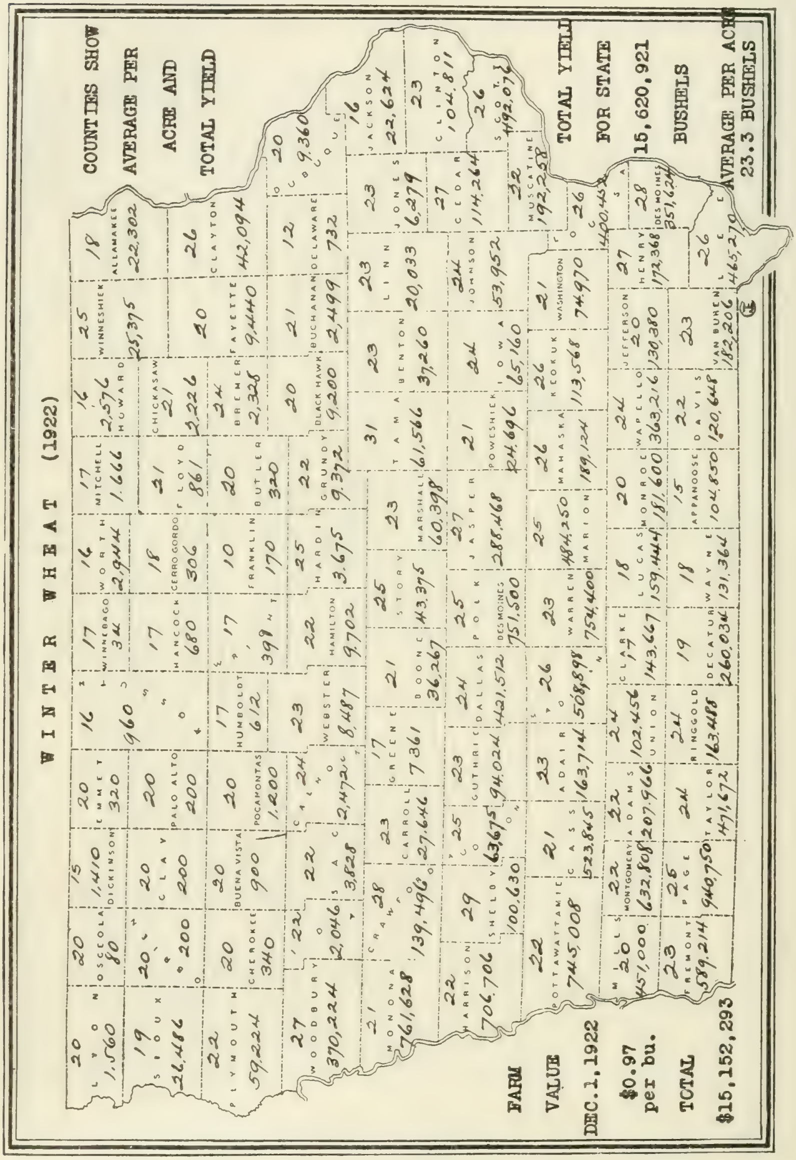

35 LYON 3,863,545
34 OSCEOLA 2,580,872
31 DICKINSON 1,721,399
37 EMMET 2,382,541
39 KOSSUTH 6,562,062
38 WINNEBAGO 2,233,298
39 WORTH 2,416,752
41 MITCHELL 3,037,977
40 HOWARD 2,388,400
41 WINNESHIEK 3,050,318
41 ALLAMAKEE 1,546,438
35 SIOUX 4,431,980
37 O'BRIEN 3,413,805
36 CLAY 3,162,060
34 PALO ALTO 3,174,988
32 HANCOCK 3,005,440
41 CERRO GORDO 3,244,125
40 FLOYD 2,997,000
CHICKASAW 42 2,606,226
39 FAYETTE 2,989,734
44 CLAYTON 2,976,028
31 PLYMOUTH 3,459,786
33 CHEROKEE 2,789,292
40 BUENA VISTA 3,938,080
37 POCAHONTAS 4,121,134
36 HUMBOLDT 2,763,360
40 WRIGHT 3,918,880
42 FRANKLIN 3,703,560
38 BUTLER 3,107,906
44 BREMER 2,520,716
25 WOODBURY 1,897,900
32 IDA 1,926,208
35 SAC 2,900,135
38 CALHOUN 4,354,344
39 WEBSTER 5,003,856
42 HAMILTON 4,314,576
46 HARDIN 3,873,062
43 GRUNDY 3,431,185
39 BLACK HAWK 2,598,258
32 BUCHANAN 2,124,544
34 DELAWARE 2,062,372
41 DUBUQUE 2,047,007
28 MONONA 1,118,684
28 CRAWFORD 2,001,328
33 CARROLL 2,483,085
39 GREENE 3,205,215
37 BOONE 3,113,032
42 STORY 3,600,030
45 MARSHALL 3,028,545
39 TAMA 2,989,467
42 BENTON 3,919,062
39 LINN 2,637,336
39 JONES 1,518,972
41 JACKSON 1,361,652
28 HARRISON 1,100,260
29 SHELBY 1,717,902
28 AUDUBON 1,250,200
37 GUTHRIE 2,094,163
38 DALLAS 2,496,410
40 POLK DES MOINES 1,905,560
39 JASPER 2,548,728
39 POWESHIEK 2,042,781
41 IOWA 1,761,032
42 JOHNSON 1,985,424
47 CEDAR 2,305,491
37 CLINTON 1,886,593
41 SCOTT 1,287,933
40 MUSCATINE 1,090,160
30 POTTAWATTAMIE 1,683,540
35 CASS 1,561,350
35 ADAIR 1,573,880
35 MADISON 1,153,390
36 WARREN 1,134,000
35 MARION 1,232,980
38 MAHASKA 1,755,980
38 KEOKUK 1,604,436
40 WASHINGTON 1,818,160
41 LOUISA 975,513
31 MILLS 599,974
32 MONTGOMERY 716,480
34 ADAMS 974,168
37 UNION 1,065,489
CLARKE 36 881,388
28 LUCAS 631,596
29 MONROE 431,810
32 WAPELLO 678,176
JEFFERSON 30 834,570
38 HENRY 1,198,710
36 DES MOINES 877,104
28 FREMONT 371,924
33 PAGE 737,055
35 TAYLOR 1,097,394
33 RINGGOLD 1,091,574
29 DECATUR 784,566
32 WAYNE 967,680
28 APPANOOSE 503,160
29 DAVIS 569,096
29 VAN BUREN 557,496
35 LEE 693,840

COUNTIES SHOW
AVERAGE AND
TOTAL YIELD

FARM
VALUE
DEC. 1, 1922
$0.34
per bu.
TOTAL
$74,065,827

TOTAL YIELD
FOR STATE
217,840,669
BUSHELS

AVERAGE PER ACRE
37.1 BUSHELS



WINTER WHEAT (1922)

COUNTIES SHOW AVERAGE PER ACRE AND TOTAL YIELD

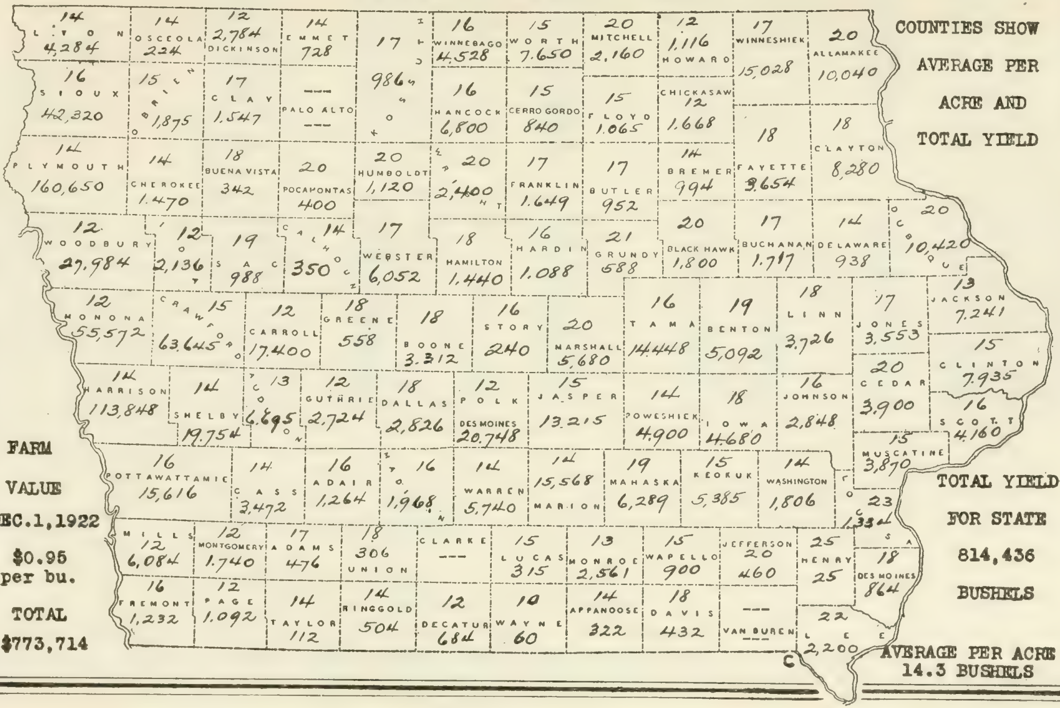
TOTAL YIELD FOR STATE 15,620,921 BUSHELS

AVERAGE PER ACRE 23.3 BUSHELS

FARM VALUE DEC.1,1922 $0.97 per bu. TOTAL $15,152,293

LYON 20 1,560
OSCEOLA 20 80
DICKINSON 15 1,410
EMMET 20 320
KOSSUTH 16 960
WINNEBAGO 17 34
WORTH 16 2,944
MITCHELL 17 1,666
HOWARD 16 2,576
WINNESHIEK 25 25,375
ALLAMAKEE 18 22,302
SIOUX 19 26,486
O'BRIEN 20 200
CLAY 20 200
PALO ALTO 20 200
HANCOCK 17 680
CERRO GORDO 18 306
FLOYD 21 861
CHICKASAW 21 3,226
FAYETTE 20 9,440
CLAYTON 26 42,094
PLYMOUTH 22 59,224
CHEROKEE 20 340
BUENA VISTA 20 900
POCAHONTAS 20 1,200
HUMBOLDT 17 612
WRIGHT 17 398
FRANKLIN 10 170
BUTLER 20 320
BREMER 24 2,328
BUCHANAN 21 2,499
DELAWARE 12 732
DUBUQUE 20 9,360
WOODBURY 27 370,224
IDA 22 2,046
SAC 22 3,828
CALHOUN 24 2,472
WEBSTER 23 8,487
HAMILTON 22 9,702
HARDIN 25 3,675
GRUNDY 22 9,372
BLACK HAWK 20 9,200
LINN 23 20,033
JONES 23 6,279
JACKSON 16 22,624
MONONA 21 761,628
CRAWFORD 28 139,496
CARROLL 23 27,646
GREENE 17 7,361
BOONE 21 36,267
STORY 25 43,375
MARSHALL 23 60,398
TAMA 31 61,566
BENTON 23 37,260
CEDAR 27 114,264
CLINTON 23 104,811
HARRISON 22 706,706
SHELBY 29 100,630
AUDUBON 25 63,675
GUTHRIE 23 94,024
DALLAS 24 421,512
POLK 25 751,500
JASPER 27 288,468
POWESHIEK 21 24,696
IOWA 24 65,160
JOHNSON 24 53,952
MUSCATINE 32 192,258
SCOTT 26 492,076
POTTAWATTAMIE 22 745,008
CASS 21 523,845
ADAIR 23 163,714
MADISON 26 508,898
WARREN 23 754,400
MARION 25 484,250
MAHASKA 26 189,124
KEOKUK 26 113,568
WASHINGTON 21 74,970
LOUISA 26 400,452
MILLS 20 451,000
MONTGOMERY 22 632,808
ADAMS 22 207,966
UNION 24 102,456
CLARKE 17 143,667
LUCAS 18 159,444
MONROE 20 181,600
WAPELLO 24 363,216
JEFFERSON 20 130,380
HENRY 27 172,368
DES MOINES 28 351,624
FREMONT 23 589,214
PAGE 25 940,750
TAYLOR 24 471,672
RINGGOLD 24 163,488
DECATUR 19 260,034
WAYNE 18 131,364
APPANOOSE 15 104,850
DAVIS 22 120,648
VAN BUREN 23 182,206
LEE 26 465,270

SPRING WHEAT (1922)


LYON
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4,284
OSCEOLA
14
224
DICKINSON
12
2,784
EMMET
14
728
17
986
WINNEBAGO
16
4,528
WORTH
15
7.650
MITCHELL
20
2,160
HOWARD
12
1,116
WINNESHIEK
17
15,028
ALLAMAKEE
20
10,040
SIOUX
16
42,320
15
1,875
CLAY
17
1,547
PALO ALTO

HANCOCK
16
6,800
CERRO GORDO
15
840
FLOYD
15
1.065
CHICKASAW
12
1,668
FAYETTE
18
3,654
CLAYTON
18
8,280
PLYMOUTH
14
160,650
CHEROKEE
14
1.470
BUENA VISTA
18
342
POCAHONTAS
20
400
HUMBOLDT
20
1,120
20
2,400
FRANKLIN
17
1.649
BUTLER
17
952
BREMER
14
994
BLACK HAWK
20
1,800
BUCHANAN
17
1.717
DELAWARE
14
938
20
10,420
WOODBURY
12
27,984
12
2,136
SAC
19
988
14
350
WEBSTER
17
6,052
HAMILTON
18
1,440
HARDIN
16
1,088
GRUNDY
21
588
TAMA
16
14.448
BENTON
19
5,092
LINN
18
3,726
JONES
17
3,553
JACKSON
13
7.241
MONONA
12
55,572
15
63,645
CARROLL
12
17.400
GREENE
18
558
BOONE
18
3.312
STORY
16
240
MARSHALL
20
5,680
CEDAR
20
3,900
CLINTON
15
7.935
HARRISON
14
113,848
SHELBY
14
19.754
13
6,695
GUTHRIE
12
2,724
DALLAS
18
2,826
POLK
12
DES MOINES
20.748
JASPER
15
13.215
POWESHIEK
14
4,900
IOWA
18
4,680
JOHNSON
16
2,848
SCOTT
16
4,160
MUSCATINE
15
3,870
POTTAWATTAMIE
16
15,616
CASS
14
3,472
ADAIR
16
1,264
16
1,968
WARREN
14
5,740
MARION
14
15,568
MAHASKA
19
6,289
KEOKUK
15
5,385
WASHINGTON
14
1,806
23
1,334
MILLS
12
6,084
MONTGOMERY
12
1.740
ADAMS
17
476
UNION
18
306
CLARKE

LUCAS
15
315
MONROE
13
2,561
WAPELLO
15
900
JEFFERSON
20
460
HENRY
25
25
DES MOINES
18
864
FREMONT
16
1,232
PAGE
12
1.092
TAYLOR
14
112
RINGGOLD
14
504
DECATUR
12
684
WAYNE
10
60
APPANOOSE
14
322
DAVIS
18
432
VAN BUREN

LEE
22
2,200

COUNTIES SHOW
AVERAGE PER
ACRE AND
TOTAL YIELD

TOTAL YIELD
FOR STATE
814,436
BUSHELS

AVERAGE PER ACRE
14.3 BUSHELS

FARM
VALUE
DEC.1,1922
$0.95
per bu.
TOTAL
$773,714

TABLE NO. 3

Acreage, average and total yield of rye, tame hay, wild hay and alfalfa; also acreage of soy beans sown with other crops and sown alone, and pastures, for the year 1922, all by counties.

Districts and Counties	Rye			Soy Beans		Hay (tame)			Hay (wild)			Alfalfa			Pasture
	Acres	Bushels per acre	Total bushels	Acres sown with other crops	Acres sown alone	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Total acreage
Northwest—															
Buena Vista	158	27	4,266	345	43	20,915	1.3	27,189	4,744	1.0	4,744	1,681	3.5	5,884	67,105
Cherokee	56	22	1,232	319	56	22,793	1.4	31,910	6,682	1.1	7,350	3,872	2.6	10,067	81,740
Clay	264	18	4,752	519	128	21,386	1.3	27,802	8,865	1.2	10,638	606	2.9	1,757	72,185
Dickinson	211	15	3,165	31	17	13,072	1.2	15,686	8,533	1.0	8,533	372	2.2	818	52,986
Emmet	154	14	2,156	19	......	16,111	1.4	22,555	6,102	1.2	7,322	280	2.2	616	50,361
Lyon	32	21	672	72	19	11,827	1.5	17,740	9,226	1.3	11,994	4,250	3.0	12,750	61,624
O'Brien	51	22	1,122	153	83	20,838	1.3	27,089	6,463	1.0	6,463	1,509	3.1	4,678	73,430
Osceola	79	20	1,580	183	18	12,584	1.2	15,101	6,838	1.3	8,889	337	2.9	977	45,682
Palo Alto	909	22	19,998	351	67	17,240	1.4	24,136	16,406	0.9	14,765	272	3.0	816	65,355
Plymouth	1,606	28	44,968	110	13	21,014	1.3	27,318	16,455	1.0	16,455	15,054	2.0	30,108	110,222
Pocahontas	274	21	5,754	39	2	17,556	1.2	21,067	7,500	1.2	9,000	393	3.1	1,218	55,533
Sioux	226	21	4,746	88	11	14,833	1.3	19,283	14,941	1.1	16,435	9,225	2.6	23,985	81,078
For District	4,020	22	94,411	2,229	457	210,169	1.32	276,876	112,755	1.09	122,588	37,851	2.80	93,674	817,301
North Central—															
Butler	1,495	20	29,900	355	14	29,069	1.7	49,417	10,671	1.1	11,837	36	2.7	97	93,255
Cerro Gordo	89	20	1,780	615	331	28,406	1.4	39,768	10,590	1.1	11,649	197	3.8	749	83,854
Floyd	686	21	14,406	101	98	30,854	1.4	43,196	4,119	1.2	4,943	97	2.3	223	75,786
Franklin	110	14	1,540	910	30	32,465	1.2	38,958	6,451	1.6	10,322	154	4.4	678	79,524
Hancock	449	18	8,082	17	13	27,730	1.5	41,595	10,776	0.8	8,621	123	2.4	295	76,318
Humboldt	5	12	60	161	9	17,537	1.2	21,044	4,240	1.0	4.240	575	3.1	1,782	44,624
Kossuth	736	25	18,400	670	207	38,904	1.4	54,466	24,054	0.8	19,243	479	2.7	1,293	117,017
Mitchell	172	30	5,160	640	154	30,956	1.4	43,338	3,932	1.0	3,932	13	2.7	35	67,982
Winnebago	266	24	6,384	125	23	17,887	1.2	21,464	15,815	1.0	15,815	79	2.4	190	54,124
Worth	426	20	8,520	255	124	22,936	1.3	29,817	11,741	1.3	14,912	20	3.3	66	60,384
Wright	55	17	935	301	......	26,149	1.4	36,609	4,608	1.0	4,608	134	3.1	415	68,850
For District	4,489	20	95,167	4,150	1,003	302,893	1.39	419,672	106,997	1.02	110,122	1,907	2.90	5,823	821,718

Northeast—															
Allamakee	370	28	10,360	283	12	55,638	1.9	105,712	1,418	1.5	2,127	9	2.7	24	158,812
Black Hawk	2,443	22	53,746	122	27	32,010	1.7	54,417	6,657	1.2	7,988	308	2.2	678	93,701
Bremer	582	18	10,476	119	44	19,549	1.6	31,278	21,370	1.2	25,644	93	4.4	409	73,865
Buchanan	1,207	18	21,726	577	67	36,494	1.4	51,092	10,264	1.2	12,317	64	3.3	211	105,704
*Chickasaw	291	22	6,402	77	12	32,714	1.3	42,528	13,631	1.2	16,357	1	2.2	2	87,932
Clayton	405	25	10,125	787	47	68,378	1.7	116,242	1,118	1.4	1,565	101	3.7	374	185,283
Delaware	1,188	25	29,700	193	8	46,774	1.3	60,806	4,977	1.4	6,968	39	2.4	94	113,439
Dubuque	241	20	4,820	250	8	63,683	1.6	101,893	685	1.3	890	76	3.3	251	151,862
Fayette	292	22	6,424	210	50	58,667	1.5	88,000	10,761	1.1	11,837	6	3.3	20	156,134
Howard	234	16	3,744	351	18	36,573	1.5	54,860	18,309	1.5	27,464	44	5.0	220	84,101
Winneshiek	300	24	7,200	312	16	60,667	1.6	97,067	4,767	1.1	5,244	18	4.0	72	147,366
For District	7,553	22	164,723	3,281	309	511,147	1.56	803,895	93,957	1.26	118,401	759	3.30	2,355	1,358,199
West Central—															
Audubon	289	20	5,780	53	12	29,818	1.4	41,745	1,054	1.3	1,370	2,104	3.1	6,522	76,377
Calhoun	107	20	2,140	114	38	16,287	1.3	21,173	2,330	1.0	2,330	686	2.7	1,852	51,786
Carroll	170	10	1,700	103	22	29,115	1.4	40,761	5,504	1.3	7,155	739	2.9	2,143	80,424
Crawford	203	22	4,466	32	8	40,048	1.3	52,062	4,229	1.3	5,498	9,100	2.4	21,840	130,126
Greene	173	20	3,460	490	29	20,954	1.2	25,145	3,564	0.8	2,851	340	1.6	544	70,291
Guthrie	129	19	2,451	342	20	34,191	1.3	44,448	2,866	1.3	3,725	768	3.8	2,918	123,288
Harrison	843	19	16,017	78	17	6,921	1.9	13,150	5,863	1.5	8,794	18,054	2.6	46,940	99,972
Ida	120	17	2,040	630	42	21,088	1.2	25,306	1,565	1.3	2,034	3,345	3.5	11,708	62,547
Monona	462	20	9,240	120	55	5,789	1.3	7,526	7,555	1.0	7,555	14,813	2.6	38,514	100,113
Sac	39	20	780	950	60	27,095	1.5	40,642	3,210	1.2	3,852	1,196	3.4	4,066	74,580
Shelby	576	23	13,248	688	19	32,861	1.4	46,005	2,643	1.4	3,700	5,857	3.4	19,914	95,820
Woodbury	750	17	12,750	149	12	12,823	1.2	15,388	8,346	0.6	5,008	24,458	2.5	61,145	111,364
For District	3,861	20	74,072	3,749	334	276,990	1.35	373,351	48,729	1.11	53,872	81,460	2.60	218,106	1,076,688

*Partly estimated.

TABLE NO. 3—Continued

Districts and Counties	Rye			Soy Beans		Hay (tame)			Hay (wild)			Alfalfa			Pasture
	Acres	Bushels per acre	Total bushels	Acres sown with other crops	Acres sown alone	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Total acreage
Central—															
Boone	132	19	2,508	220	20	22,435	1.5	33,652	4,378	1.1	4,816	1,230	2.8	3,444	76,151
Dallas	136	20	2,720	318	42	22,576	1.5	33,864	2,470	1.3	3,211	730	3.0	2,190	95,597
Grundy	41	28	1,148	119	18	26,203	1.6	41,925	4,178	1.3	5,431	92	3.1	285	73,092
Hamilton	317	23	7,291	398	57	21,457	1.2	25,748	3,530	1.1	3,883	384	2.6	998	69,126
Hardin	55	20	1,100	329	50	29,586	1.4	41,420	4,033	1.4	5,646	209	3.3	690	75,923
Jasper	410	21	8,610	392	112	46,494	1.5	69,741	551	1.4	771	192	2.6	499	147,650
Marshall	354	16	5,664	767	124	39,104	1.7	66,477	288	1.1	317	126	4.2	529	91,985
Polk	181	18	3,285	167	84	24,839	1.7	42,226	1,425	1.4	1,995	1,036	3.0	3,108	85,234
Poweshiek	47	26	1,222	495	37	39,632	1.8	71,338	109	1.3	142	103	1.9	196	118,039
Story	160	20	3,200	712	69	27,278	1.5	40,917	2,660	1.3	3,458	314	2.7	848	67,143
Tama	80	18	1,440	38	......	51,657	1.6	82,651	849	1.1	934	138	3.8	524	139,311
Webster	168	15	2,520	375	83	24,047	1.5	36,070	6,300	1.2	7,560	1,203	3.3	3,970	81,963
For District	2,081	20	40,681	4,330	696	375,308	1.56	586,029	30,771	1.20	38,164	5,757	3.08	17,281	1,121,214
East Central—															
Benton	1,378	20	27,560	729	45	49,906	2.2	109,793	1,387	1.5	2,080	119	4.4	524	114,013
Cedar	875	28	24,500	2,288	28	48,791	1.9	92,703	130	1.2	156	94	3.3	310	112,039
Clinton	2,458	18	44,244	323	28	59,874	1.5	89,811	1,245	1.1	1,370	300	3.0	900	144,524
Iowa	338	15	5,070	1,234	61	36,124	1.7	61,411	434	1.1	477	68	2.2	150	123,821
Jackson	926	16	14,816	179	4	64,335	1.6	102,936	1,638	1.1	1,802	97	3.5	340	195,982
Johnson	988	17	16,796	490	63	48,872	1.8	87,970	696	1.1	766	210	2.3	483	129,359
Jones	861	15	12,915	382	18	52,804	1.5	79,206	178	1.1	196	67	2.4	161	143,971
Linn	1,463	20	29,260	1,069	158	56,656	1.5	84,984	2,164	1.1	2,380	168	4.6	773	142,494
*Muscatine	3,420	17	58,140	635	20	26,338	1.6	42,141	426	1.1	469	469	3.5	1,642	82,468
Scott	2,414	17	41,038	1,377	59	31,747	1.7	53,970	1,386	1.2	1,663	1,920	3.0	5,760	81,125
For District	15,121	18	274,339	8,706	484	474,977	1.70	804,925	9,684	1.17	11,359	3,512	3.12	11,043	1,269,796

Southwest—															
Adair	261	15	3,915	357	20	36,848	1.2	44,218	1,910	1.7	3,247	198	2.2	436	119,634
Adams	283	24	6,792	150	15	25,817	1.4	36,144	1,590	1.2	1,908	1,059	3.3	3,495	108,174
*Cass	422	18	7,596	87	6	30,804	1.4	43,126	868	1.1	955	1,133	3.3	3,739	102,796
Fremont	363	22	7,986	5	16	10,539	1.2	12,647	1,815	2.0	3,630	8,842	3.0	26,526	73,250
Mills	268	16	4,288	20	......	9,676	1.5	14,514	3,046	1.5	4,569	10,436	2.8	29,221	65,426
Montgomery	571	22	12,562	279	7	18,537	1.4	25,952	452	1.3	588	5,289	2.4	12,694	73,297
Page	599	24	14,376	202	16	22,492	1.3	29,240	896	1.1	986	7,404	2.3	17,027	106,283
Pottawattamie	712	20	14,240	167	6	27,972	1.6	44,755	4,621	1.2	5,545	19,515	2.0	39,030	137,955
Taylor	387	25	9,675	286	13	27,906	1.8	50,231	319	1.3	415	1,298	2.7	3,505	122,541
For District	3,866	21	81,430	1,553	99	210,591	1.43	300,827	15,517	1.42	21,843	55,174	2.45	135,673	909,356
South Central—															
Appanoose	286	17	4,862	251	30	47,159	1.4	66,023	1,091	1.6	1,746	121	3.8	460	140,457
Clarke	174	12	2,088	97	15	31,780	1.3	41,314	42	1.3	55	22	2.0	44	110,416
Decatur	639	16	10,224	203	51	36,069	1.4	50,497	204	1.3	265	176	3.3	581	147,767
Lucas	187	10	1,870	703	25	33,296	1.5	49,944	27	1.1	30	138	2.2	304	118,423
Madison	680	18	12,240	317	38	27,947	1.2	33,536	1,481	1.2	1,777	684	3.7	2,531	138,734
Marion	128	19	2,432	299	2	35,154	1.5	52,731	800	1.3	1,040	425	3.4	1,445	133,509
Monroe	252	15	3,780	20	11	38,729	1.5	58,094	265	1.3	344	53	2.2	117	130,123
Ringgold	700	16	11,200	83	6	37,569	1.4	52,597	289	1.4	405	90	2.0	180	132,312
Union	531	20	10,620	293	23	28,247	1.3	36,721	614	1.4	860	67	2.6	174	107,013
Warren	343	21	7,203	188	6	34,932	1.5	52,398	450	1.1	495	543	2.9	1,575	129,562
Wayne	295	12	3,540	3,159	289	47,128	1.2	56,554	106	1.1	1,166	112	3.0	336	118,265
For District	4,215	16	70,059	5,613	496	398,010	1.39	550,409	5,369	1.32	8,183	2,431	3.15	7,747	1,406,581
Southeast—															
Davis	256	14	3,584	174	4	48,462	1.1	53,308	14	1.6	22	154	3.1	477	155,247
Des Moines	846	21	17,766	742	117	22,548	1.6	36,077	67	2.4	161	463	2.4	1,111	89,844
*Henry	553	20	11,060	3,577	94	28,768	1.5	43,152	....	......	....	83	4.4	365	99,565
Jefferson	305	19	5,795	1,468	77	39,317	1.2	47,180	25	1.1	28	54	3.8	205	106,505
Keokuk	182	19	3,458	575	26	47,248	1.6	75,597	62	1.2	74	83	2.2	183	128,412
*Lee	3,874	19	73,606	638	164	34,321	1.7	58,346	832	1.2	998	955	3.6	3,438	143,864
Louisa	2,759	20	55,180	715	63	19,817	1.6	31,707	250	2.0	500	95	2.2	209	77,436
Mahaska	211	20	4,220	392	39	43,512	1.5	65,268	186	1.6	298	119	3.0	357	118,592
Van Buren	599	15	8,985	432	108	40,375	1.4	56,525	9	0.8	6	495	2.9	1,436	153,648
Wapello	279	20	5,580	339	66	34,272	1.2	41,126	14	1.5	21	156	3.1	484	104,282
Washington	240	18	4,320	835	48	40,370	1.9	76,703	110	1.0	110	43	2.7	116	121,271
For District	10,104	19	193,554	9,887	806	399,010	1.49	584,989	1,569	1.47	2,218	2,700	3.13	8,381	1,298,666
For State	55,310	19.7	1,088,436	43,498	4,684	3,159,095	1.49	4,700,973	425,348	1.14	486,750	191,551	2.61	500,083	10,079,519

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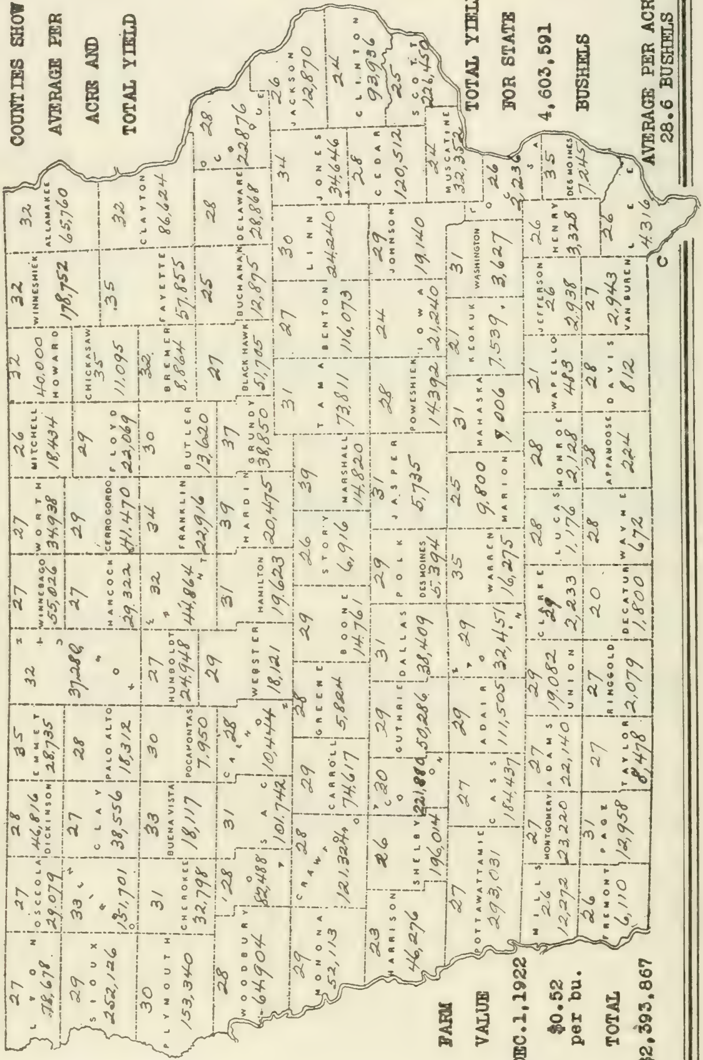
* Partly estimated.

BARLEY (1922)

COUNTIES SHOW AVERAGE PER ACRE AND TOTAL YIELD

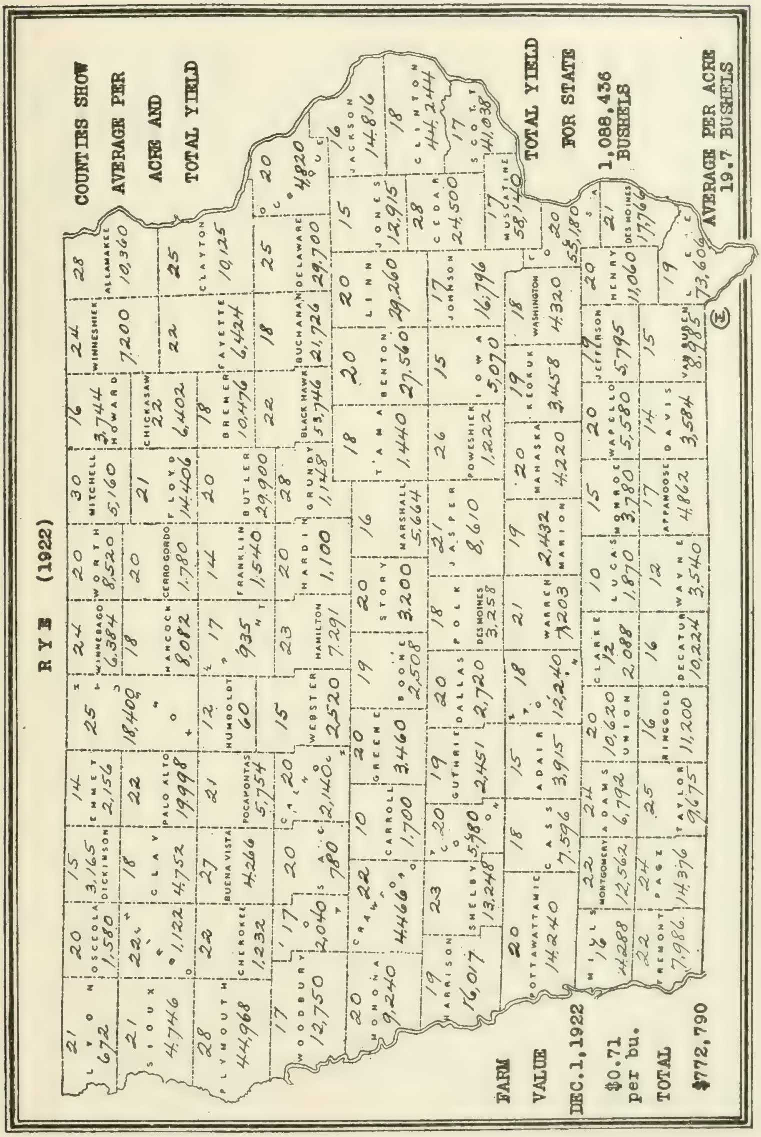

LYON 27 76,678
OSCEOLA 27 29,079
DICKINSON 28 46,816
EMMET 35 28,735
KOSSUTH 32 37,286
WINNEBAGO 27 55,026
WORTH 27 34,938
MITCHELL 26 18,434
HOWARD 32 40,000
WINNESHIEK 32 178,752
ALLAMAKEE 32 65,760
SIOUX 29 252,126
O'BRIEN 33 131,701
CLAY 27 38,556
PALO ALTO 28 18,312
HANCOCK 27 29,322
CERRO GORDO 29 41,470
FLOYD 29 22,069
CHICKASAW 35 11,095
FAYETTE 35 57,855
CLAYTON 32 86,624
PLYMOUTH 30 153,340
CHEROKEE 31 32,798
BUENA VISTA 33 18,117
POCAHONTAS 30 7,950
HUMBOLDT 27 24,948
WRIGHT 32 44,864
FRANKLIN 34 22,916
BUTLER 30 13,620
BREMER 32 8,864
BLACK HAWK 27 51,705
BUCHANAN 25 12,895
DELAWARE 28 28,868
DUBUQUE 28 22,876
WOODBURY 28 64904
IDA 28 82,488
SAC 31 101,742
CALHOUN 28 10,444
WEBSTER 29 18,121
HAMILTON 31 19,623
HARDIN 39 20,475
GRUNDY 37 38,850
TAMA 31 73,811
BENTON 27 116,073
LINN 30 24,240
JONES 34 34,646
JACKSON 26 12,870
MONONA 29 52,113
CRAWFORD 28 121,324
CARROLL 29 74,617
GREENE 29 5,824
BOONE 29 14,761
STORY 26 6,916
MARSHALL 39 14,820
CEDAR 28 120,512
CLINTON 24 93,936
HARRISON 23 46,276
SHELBY 26 196,014
AUDUBON 30 221,880
GUTHRIE 29 50,286
DALLAS 31 38,409
POLK 29 DES MOINES 5,394
JASPER 31 5,735
POWESHIEK 28 14392
IOWA 24 21,240
JOHNSON 29 19,140
MUSCATINE 24 32,352
SCOTT 25 226,450
POTTAWATTAMIE 27 293,031
CASS 27 184,437
ADAIR 29 111,505
MADISON 29 32,451
WARREN 35 16,275
MARION 25 9,800
MAHASKA 31 9,006
KEOKUK 21 7,539
WASHINGTON 31 3,627
LOUISA 26 2,236
MILLS 26 12,272
MONTGOMERY 27 23,220
ADAMS 27 22,140
UNION 29 19,082
CLARKE 29 2,233
LUCAS 28 1,176
MONROE 28 2,128
WAPELLO 21 483
JEFFERSON 26 2,938
HENRY 26 3,328
DES MOINES 35 7,245
FREMONT 26 6,110
PAGE 31 12,958
TAYLOR 27 8,478
RINGGOLD 27 2,079
DECATUR 20 1,800
WAYNE 28 672
APPANOOSE 28 224
DAVIS 28 812
VAN BUREN 27 2,943
LEE 26 4316
C

TOTAL YIELD FOR STATE 4,603,591 BUSHELS

AVERAGE PER ACRE 28.6 BUSHELS

FARM VALUE DEC.1,1922 $0.52 per bu.

TOTAL $2,393,867



RYE (1922)

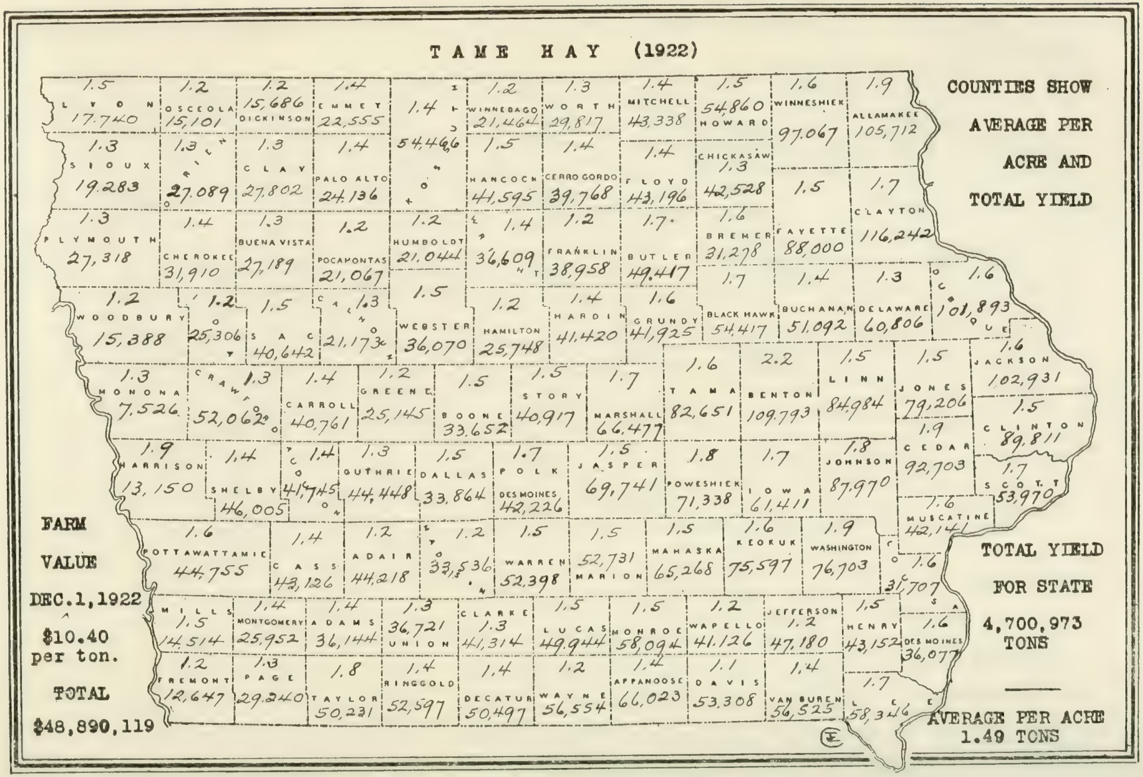
COUNTIES SHOW AVERAGE PER ACRE AND TOTAL YIELD

TOTAL YIELD FOR STATE 1,088,436 BUSHELS

AVERAGE PER ACRE 19.7 BUSHELS

FARM VALUE DEC.1,1922 $0.71 per bu. TOTAL $772,790

LYON 21 672
OSCEOLA 20 1,580
DICKINSON 15 3,165
EMMET 14 2,156
KOSSUTH 25 18,400
WINNEBAGO 24 6,384
WORTH 20 8,520
MITCHELL 30 5160
HOWARD 16 3,744
WINNESHIEK 24 7200
ALLAMAKEE 28 10,360
SIOUX 21 4,746
O'BRIEN 22 1,122
CLAY 18 4,752
PALO ALTO 22 19998
HANCOCK 18 8,082
CERRO GORDO 20 1,780
FLOYD 21 14,406
CHICKASAW 22 6,402
FAYETTE 22 6,424
CLAYTON 25 10,125
PLYMOUTH 28 44,968
CHEROKEE 22 1,232
BUENA VISTA 27 4,266
POCAHONTAS 21 5,754
HUMBOLDT 12 60
WRIGHT 17 935
FRANKLIN 14 1,540
BUTLER 20 29,900
BREMER 18 10,476
BUCHANAN 18 21,726
DELAWARE 25 29,700
DUBUQUE 20 4,820
WOODBURY 17 12,750
IDA 17 2,040
SAC 20 780
CALHOUN 20 2,140
WEBSTER 15 2520
HAMILTON 23 7,291
HARDIN 20 1,100
GRUNDY 28 1,148
BLACK HAWK 22 53,746
BENTON 20 27,560
LINN 20 29,260
JONES 15 12,915
JACKSON 16 14,816
MONONA 20 9,240
CRAWFORD 22 4466
CARROLL 10 1,700
GREENE 20 3,460
BOONE 19 2,508
STORY 20 3,200
MARSHALL 16 5,664
TAMA 18 1,440
IOWA 15 5,070
JOHNSON 17 16,796
CEDAR 28 24,500
CLINTON 18 44,244
MUSCATINE 17 58,140
SCOTT 17 41,038
HARRISON 19 16,017
SHELBY 23 13,248
AUDUBON 20 5,780
GUTHRIE 19 2,451
DALLAS 20 2,720
POLK 18
DES MOINES 3,258
JASPER 21 8,610
POWESHIEK 26 1,222
POTTAWATTAMIE 20 14240
CASS 18 7,596
ADAIR 15 3,915
MADISON 18 12,240
WARREN 21 1,203
MARION 19 2,432
MAHASKA 20 4,220
KEOKUK 19 3,458
WASHINGTON 18 4,320
LOUISA 20 55,180
DES MOINES 21 17,766
MILLS 16 4,288
MONTGOMERY 22 12,562
ADAMS 24 6,792
UNION 20 10,620
CLARKE 12 2,088
LUCAS 10 1,870
MONROE 15 3,780
WAPELLO 20 5,580
JEFFERSON 19 5795
HENRY 20 11,060
LEE 19 73,606
FREMONT 22 7,986
PAGE 24 14,376
TAYLOR 25 9,675
RINGGOLD 16 11,200
DECATUR 16 10,224
WAYNE 12 3,540
APPANOOSE 17 4,862
DAVIS 14 3,584
VAN BUREN 15 8,985



TAME HAY (1922)

COUNTIES SHOW AVERAGE PER ACRE AND TOTAL YIELD

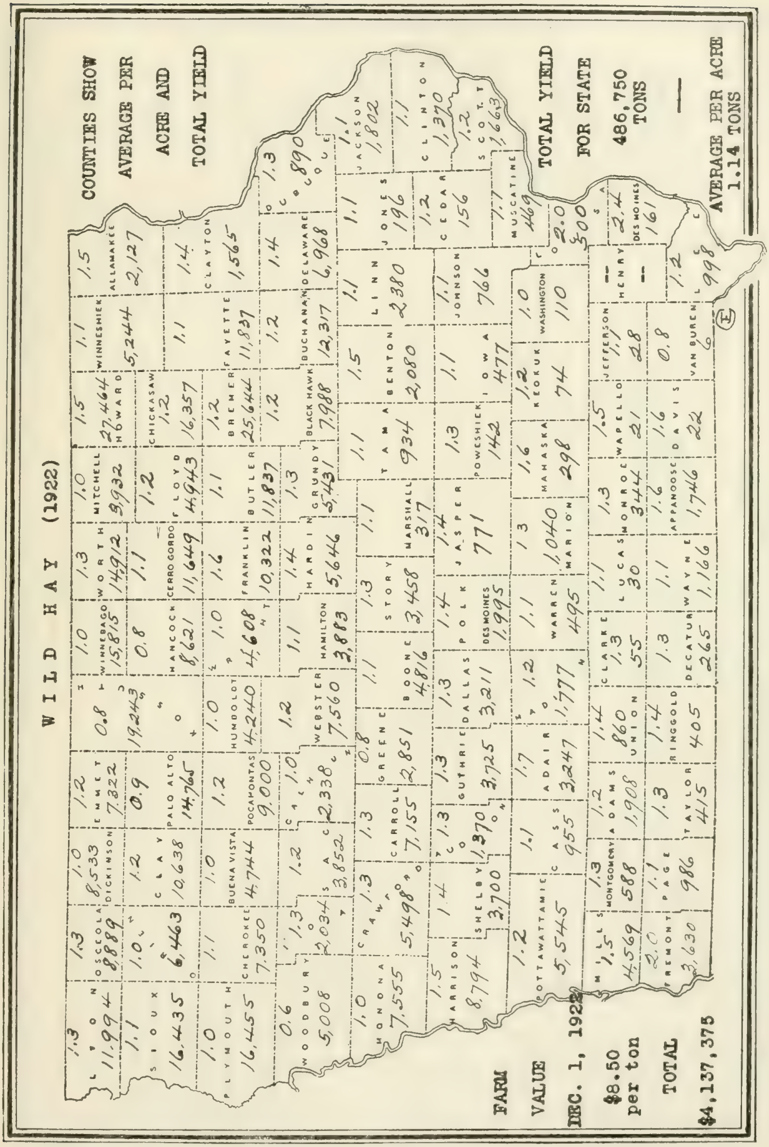
TOTAL YIELD FOR STATE 4,700,973 TONS

AVERAGE PER ACRE 1.49 TONS

FARM VALUE DEC.1,1922 $10.40 per ton.

TOTAL $48,890,119

1.5 LYON 17,740
1.2 OSCEOLA 15,101
1.2 15,686 DICKINSON
1.4 EMMET 22,555
1.4 54,466
1.2 WINNEBAGO 21,464
1.3 WORTH 29,817
1.4 MITCHELL 43,338
1.5 54,860 HOWARD
1.6 WINNESHIEK 97,067
1.9 ALLAMAKEE 105,712
1.3 SIOUX 19,283
1.3 27,089
1.3 CLAY 27,802
1.4 PALO ALTO 24,136
1.5 HANCOCK 41,595
1.4 CERRO GORDO 39,768
1.4 FLOYD 43,196
CHICKASAW 1.3 42,528
1.5
1.7 CLAYTON 116,242
1.3 PLYMOUTH 27,318
1.4 CHEROKEE 31,910
1.3 BUENA VISTA 27,189
1.2 POCAHONTAS 21,067
1.2 HUMBOLDT 21,044
1.4 36,609
1.2 FRANKLIN 38,958
1.7 BUTLER 49,417
1.6 BREMER 31,278
FAYETTE 88,000
1.2 WOODBURY 15,388
1.2 25,306
1.5 SAC 40,642
1.3 21,173
1.5 WEBSTER 36,070
1.2 HAMILTON 25,748
1.4 HARDIN 41,420
1.6 GRUNDY 41,925
1.7 BLACK HAWK 54,417
1.4 BUCHANAN 51,092
1.3 DELAWARE 60,806
1.6 101,893
1.3 MONONA 7,526
1.3 52,062
1.4 CARROLL 40,761
1.2 GREENE 25,145
1.5 BOONE 33,652
1.5 STORY 40,917
1.7 MARSHALL 66,477
1.6 TAMA 82,651
2.2 BENTON 109,793
1.5 LINN 84,984
1.5 JONES 79,206
1.6 JACKSON 102,931
1.5 CLINTON 89,811
1.9 HARRISON 13,150
1.4 SHELBY 46,005
1.4 41,745
1.3 GUTHRIE 44,448
1.5 DALLAS 33,864
1.7 POLK DES MOINES 42,226
1.5 JASPER 69,741
1.8 POWESHIEK 71,338
1.7 IOWA 61,411
1.8 JOHNSON 87,970
1.9 CEDAR 92,703
1.7 SCOTT 53,970
1.6 MUSCATINE 42,141
1.6 POTTAWATTAMIE 44,755
1.4 CASS 43,126
1.2 ADAIR 44,218
1.2 33,536
1.5 WARREN 52,398
1.5 52,731 MARION
1.5 MAHASKA 65,268
1.6 KEOKUK 75,597
1.9 WASHINGTON 76,703
1.6 31,707
MILLS 1.5 14,514
1.4 MONTGOMERY 25,952
1.4 ADAMS 36,144
1.3 36,721 UNION
CLARKE 1.3 41,314
1.5 LUCAS 49,944
1.5 MONROE 58,094
1.2 WAPELLO 41,126
JEFFERSON 1.2 47,180
1.5 HENRY 43,152
1.6 DES MOINES 36,077
1.2 FREMONT 12,647
1.3 PAGE 29,240
1.8 TAYLOR 50,231
1.4 RINGGOLD 52,597
1.4 DECATUR 50,497
1.2 WAYNE 56,554
1.4 APPANOOSE 66,023
1.1 DAVIS 53,308
1.4 VAN BUREN 56,525
1.7 58,346



WILD HAY (1922)

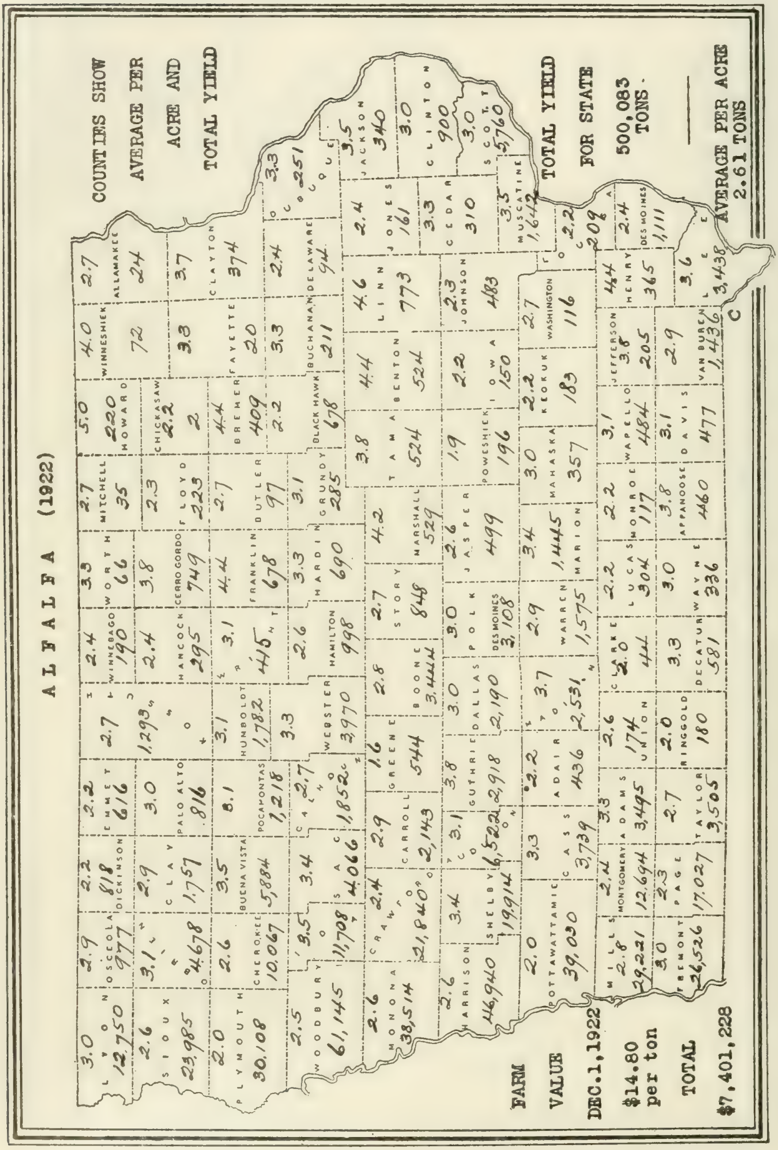
COUNTIES SHOW AVERAGE PER ACRE AND TOTAL YIELD

TOTAL YIELD FOR STATE 486,750 TONS

AVERAGE PER ACRE 1.14 TONS

FARM VALUE DEC. 1, 1922 $8.50 per ton TOTAL $4,137,375

LYON 1.3 11,994
OSCEOLA 1.3 8,889
DICKINSON 1.0 8,533
EMMET 1.2 7,322
KOSSUTH 0.8 19,243
WINNEBAGO 1.0 15,815
WORTH 1.3 14,912
MITCHELL 1.0 3,932
HOWARD 1.5 27,464
WINNESHIEK 1.1 5,244
ALLAMAKEE 1.5 2,127
SIOUX 1.1 16,435
O'BRIEN 1.0 6,463
CLAY 1.2 10,638
PALO ALTO 0.9 14,765
HANCOCK 0.8 8,621
CERRO GORDO 1.1 11,649
FLOYD 1.2 4,943
CHICKASAW 1.2 16,357
FAYETTE 1.1 11,837
CLAYTON 1.4 1,565
PLYMOUTH 1.0 16,455
CHEROKEE 1.1 7,350
BUENA VISTA 1.0 4,744
POCAHONTAS 1.2 9,000
HUMBOLDT 1.0 4,240
WRIGHT 1.0 4,608
FRANKLIN 1.6 10,322
BUTLER 1.1 11,837
BREMER 1.2 25,644
BUCHANAN 1.2 12,317
DELAWARE 1.4 6,968
DUBUQUE 1.3 890
WOODBURY 0.6 5,008
IDA 1.3 2,034
SAC 1.2 3,852
CALHOUN 1.0 2,338
WEBSTER 1.2 7,560
HAMILTON 1.1 3,883
HARDIN 1.4 5,646
GRUNDY 1.3 5,431
BLACK HAWK 1.2 7,988
MONONA 1.0 7,555
CRAWFORD 1.3 5,498
CARROLL 1.3 7,155
GREENE 0.8 2,851
BOONE 1.1 4,816
STORY 1.3 3,458
MARSHALL 1.1 317
TAMA 1.1 934
BENTON 1.5 2,080
LINN 1.1 2380
JONES 1.1 196
JACKSON 1.1 1,802
CLINTON 1.1 1,370
HARRISON 1.5 8,794
SHELBY 1.4 3,700
AUDUBON 1.3 1,370
GUTHRIE 1.3 3,725
DALLAS 1.3 3,211
POLK 1.4 1,995
JASPER 1.4 771
POWESHIEK 1.3 142
IOWA 1.1 477
JOHNSON 1.1 766
CEDAR 1.2 156
SCOTT 1.2 1,663
MUSCATINE 1.1 469
POTTAWATTAMIE 1.2 5,545
CASS 1.1 955
ADAIR 1.7 3,247
MADISON 1.2 1,777
WARREN 1.1 495
MARION 1.3 1,040
MAHASKA 1.6 298
KEOKUK 1.2 74
WASHINGTON 1.0 110
LOUISA 2.0 300
MILLS 1.5 4,569
MONTGOMERY 1.3 588
ADAMS 1.2 1,908
UNION 1.4 860
CLARKE 1.3 55
LUCAS 1.1 30
MONROE 1.3 344
WAPELLO 1.5 21
JEFFERSON 1.1 28
HENRY -- --
DES MOINES 2.4 161
FREMONT 2.0 3,630
PAGE 1.1 986
TAYLOR 1.3 415
RINGGOLD 1.4 405
DECATUR 1.3 265
WAYNE 1.1 1,166
APPANOOSE 1.6 1,746
DAVIS 1.6 22
VAN BUREN 0.8 6
LEE 1.2 998


LYON 3.0 12,750
OSCEOLA 2.9 977
DICKINSON 2.2 818
EMMET 2.2 616
KOSSUTH 2.7 1,293
WINNEBAGO 2.4 190
WORTH 3.3 66
MITCHELL 2.7 35
HOWARD 5.0 220
WINNESHIEK 4.0 72
ALLAMAKEE 2.7 24
SIOUX 2.6 23,985
O'BRIEN 3.1 4,678
CLAY 2.9 1,757
PALO ALTO 3.0 816
HANCOCK 2.4 295
CERRO GORDO 3.8 749
FLOYD 2.3 223
CHICKASAW 2.2 2
FAYETTE 3.8 20
CLAYTON 3.7 374
PLYMOUTH 2.0 30,108
CHEROKEE 2.6 10,067
BUENA VISTA 3.5 5,884
POCAHONTAS 3.1 1,218
HUMBOLDT 3.1 1,782
WRIGHT 3.1 415
FRANKLIN 4.4 678
BUTLER 2.7 97
BREMER 4.4 409
BUCHANAN 3.3 211
DELAWARE 2.4 94
DUBUQUE 3.3 251
WOODBURY 2.5 61,145
IDA 3.5 11,708
SAC 3.4 4,066
CALHOUN 2.7 1,852
WEBSTER 3.3 3970
HAMILTON 2.6 998
HARDIN 3.3 690
GRUNDY 3.1 285
BLACK HAWK 2.2 678
JACKSON 3.5 340
MONONA 2.6 38,514
CRAWFORD 2.4 21,840
CARROLL 2.9 2,143
GREENE 1.6 544
BOONE 2.8 3,444
STORY 2.7 848
MARSHALL 4.2 529
TAMA 3.8 524
BENTON 4.4 524
LINN 4.6 773
JONES 2.4 161
CLINTON 3.0 900
HARRISON 2.6 46,940
SHELBY 3.4 19,914
AUDUBON 3.1 6,522
GUTHRIE 3.8 2,918
DALLAS 3.0 2,190
POLK 3.0 DES MOINES 3,108
JASPER 2.6 499
POWESHIEK 1.9 196
IOWA 2.2 150
JOHNSON 2.3 483
CEDAR 3.3 310
SCOTT 3.0 5760
POTTAWATTAMIE 2.0 39,030
CASS 3.3 3,739
ADAIR 2.2 436
MADISON 3.7 2,531
WARREN 2.9 1,575
MARION 3.4 1,445
MAHASKA 3.0 357
KEOKUK 2.2 183
WASHINGTON 2.7 116
MUSCATINE 3.5 1,642
LOUISA 2.2 209
MILLS 2.8 29,221
MONTGOMERY 2.4 12,694
ADAMS 3.3 3,495
UNION 2.6 174
CLARKE 2.0 441
LUCAS 2.2 304
MONROE 2.2 117
WAPELLO 3.1 484
JEFFERSON 3.8 205
HENRY 4.4 365
DES MOINES 2.4 1,111
FREMONT 3.0 26,526
PAGE 2.3 17,027
TAYLOR 2.7 3,505
RINGGOLD 2.0 180
DECATUR 3.3 581
WAYNE 3.0 336
APPANOOSE 3.8 460
DAVIS 3.1 477
VAN BUREN 2.9 1,436
LEE 3.6 3,438

ALFALFA (1922)

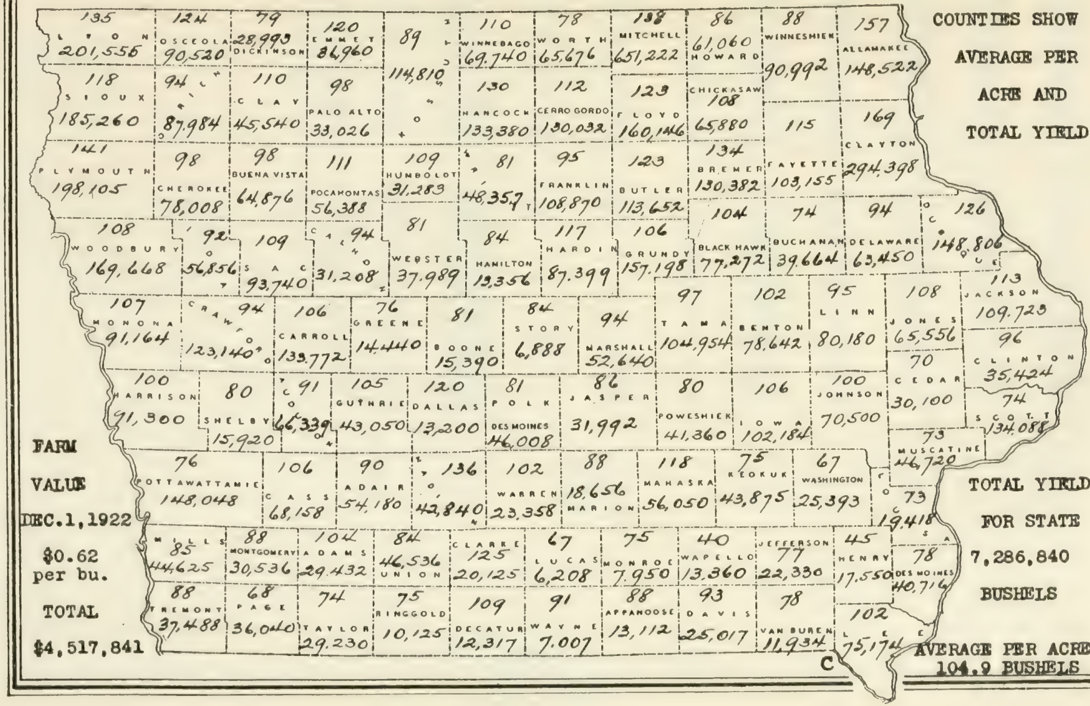
COUNTIES SHOW AVERAGE PER ACRE AND TOTAL YIELD

TOTAL YIELD FOR STATE 500,083 TONS.

AVERAGE PER ACRE 2.61 TONS

FARM VALUE DEC.1,1922 $14.80 per ton TOTAL $7,401,228

POTATOES (1922)


LYON
135
201,556
OSCEOLA
124
90,520
DICKINSON
79
28,993
EMMET
120
84,960
89
114,810
WINNEBAGO
110
69,740
WORTH
78
65,676
MITCHELL
138
651,222
HOWARD
86
61,060
WINNESHIEK
88
90,992
ALLAMAKEE
157
148,522
SIOUX
118
185,260
94
87,984
CLAY
110
45,540
PALO ALTO
98
33,026
HANCOCK
130
133,380
CERRO GORDO
112
130,032
FLOYD
123
160,146
CHICKASAW
108
65,880
FAYETTE
115
103,155
CLAYTON
169
294,398
PLYMOUTH
141
198,105
CHEROKEE
98
78,008
BUENA VISTA
98
64,876
POCAHONTAS
111
56,388
HUMBOLDT
109
31,283
81
48,357
FRANKLIN
95
108,870
BUTLER
123
113,652
BREMER
134
130,382
BLACK HAWK
104
77,272
BUCHANAN
74
39,664
DELAWARE
94
63,450
126
148,806
WOODBURY
108
169,668
92
56,856
SAC
109
93,740
94
31,208
WEBSTER
81
37,989
HAMILTON
84
13,356
HARDIN
117
87,399
GRUNDY
106
157,198
JACKSON
113
109,723
MONONA
107
91,164
CRAWFORD
94
123,140
CARROLL
106
133,772
GREENE
76
14,440
BOONE
81
15,390
STORY
84
6,888
MARSHALL
94
52,640
TAMA
97
104,954
BENTON
102
78,642
LINN
95
80,180
JONES
108
65,556
CLINTON
96
35,424
HARRISON
100
91,300
SHELBY
80
15,920
91
66,339
GUTHRIE
105
43,050
DALLAS
120
13,200
POLK
81
DES MOINES
46,008
JASPER
86
31,992
POWESHIEK
80
41,360
IOWA
106
102,184
JOHNSON
100
70,500
CEDAR
70
30,100
SCOTT
74
134,088
MUSCATINE
73
46,720
POTTAWATTAMIE
76
148,048
CASS
106
68,158
ADAIR
90
54,180
136
42,840
WARREN
102
23,358
MARION
88
18,656
MAHASKA
118
56,050
KEOKUK
75
43,875
WASHINGTON
67
25,393
73
19,418
MILLS
85
44,625
MONTGOMERY
88
30,536
ADAMS
104
29,432
UNION
84
46,536
CLARKE
125
20,125
LUCAS
67
6,208
MONROE
75
7,950
WAPELLO
40
13,360
JEFFERSON
77
22,330
HENRY
45
17,550
DES MOINES
78
40,716
FREMONT
88
37,488
PAGE
68
36,040
TAYLOR
74
29,230
RINGGOLD
75
10,125
DECATUR
109
12,317
WAYNE
91
7,007
APPANOOSE
88
13,112
DAVIS
93
25,017
VAN BUREN
78
11,934
LEE
102
75,174
C

COUNTIES SHOW
AVERAGE PER
ACRE AND
TOTAL YIELD

FARM
VALUE
DEC.1,1922
$0.62
per bu.
TOTAL
$4,517,841

TOTAL YIELD
FOR STATE
7,286,840
BUSHELS

AVERAGE PER ACRE
104.9 BUSHELS

TABLE NO. 4

Acreage and total yield of potatoes, sweet corn, pop corn, timothy seed, clover seed and flax seed; for the year 1922, all by counties.

Districts and Counties	Potatoes			Sweet Corn		Pop Corn		Timothy Seed		Clover Seed		Flax Seed	
	Acres	Bushels per acre	Total bushels	Acres	Total tons green corn gathered for canning	Acres	Total pounds	Acres	Total bushels	Acres	Total bushels	Acres	Total bushels
Northwest—													
Buena Vista	662	98	64,876	653	1,963	8	17,900	61	246	....	....	10	60
Cherokee	796	98	78,008	6	18	6	3,930	111	500	195	197	....	....
Clay	414	110	45,540	2	5	215	343,007	602	1,631	276	90	108	1,296
Dickinson	367	79	28,993	9	17	1	2,550	208	808	171	171	166	1,660
Emmet	308	120	36,960	....	....	2	6,000	18	67	143	107	135	1,080
Lyon	1,493	135	201,555	....	....	4	9,000	75	286	144	166	53	530
O'Brien	936	94	87,984	1	1	12	6,720	171	604	393	250	25	250
Osceola	730	124	90,520	....	....	2	1,998	338	1,554	176	117	241	2,892
Palo Alto	337	98	33,026	1	1	2	1,668	55	80	80	66	279	3,069
Plymouth	1,405	141	198,105	10	30	78	108,400	94	272	780	1,056	187	1,870
Pocahontas	508	111	56,388	....	....	26	35,200	54	220	122	180	60	600
Sioux	1,570	118	185,260	....	....	18	17,360	58	314	39	48	....	....
For District	9,526	116	1,107,215	682	2,035	374	553,733	1,845	6,582	2,519	2,448	1,264	13,307
North Central—													
Butler	924	123	113,652	222	468	14	16,160	586	2,852	71	37	....	....
Cerro Gordo	1,161	112	130,032	45	103	5	6,400	112	363	78	71	85	510
Floyd	1,302	123	160,146	3	5	32	86,000	1,935	7,762	159	68	167	3,340
Franklin	1,146	95	108,870	221	671	2	3,050	199	912	88	120	13	130
Hancock	1,026	130	133,380	146	440	1	984	3	14	127	53	266	2,926
Humboldt	287	109	31,283	....	....	1	460	53	165	107	47	....	....
Kossuth	1,290	89	114,810	....	....	6	8,100	72	380	149	94	1,137	13,644
Mitchell	4,719	138	651,222	....	....	129	168,050	3,675	15,771	531	412	352	3,520
Winnebago	634	110	69,740	766	2,265	....	....	31	152	41	31	480	5,280
Worth	842	78	65,676	227	665	2	4,505	304	1,511	148	125	1,308	11,772
Wright	597	81	48,357	....	....	14	17,350	40	193	191	91	82	820
For District	13,928	118	1,627,168	1,630	4,617	206	311,059	7,010	30,075	1,690	1,149	3,890	41,942

Northeast—													
Allamakee	946	157	148,522	....	....	5	5,740	5,365	27,964	3,937	5,472	14	140
Black Hawk	743	104	77,272	3,278	6,395	18	22,490	1,177	6,828	279	238	4	40
Bremer	973	134	130,382	770	2,312	3	3,010	110	591	256	191	....	....
Buchanan	536	74	39,664	275	763	18	25,536	854	3,278	203	188	....	....
*Chickasaw	610	108	65,880	....	....	1	1,800	6,001	19,965	364	333	12	120
Clayton	1,742	169	294,398	482	1,964	....	....	2,582	15,229	5,395	5,337	....	....
Delaware	675	94	63,450	162	469	13	56,480	1,428	7,274	686	671	....	....
Dubuque	1,181	126	148,806	188	483	2	3,610	1,630	7,972	4,658	4,857	....	....
Fayette	897	115	103,155	152	527	9	18,125	4,059	17,258	512	477	14	140
Howard	710	86	61,060	1	1	5	7,660	5,960	21,711	230	116	347	2,776
Winneshiek	1,034	88	90,992	....	....	3	4,470	10,360	46,286	885	738	144	1,440
For District	10,047	121	1,223,581	5,308	12,914	77	148,921	39,526	174,356	17,405	18,618	535	4,656
West Central—													
Audubon	729	91	66,339	284	558	....	....	1,406	5,367	372	305	....	....
Calhoun	332	94	31,208	380	1,222	2	3,820	21	94	137	94	2	20
Carroll	1,262	106	133,772	....	....	1	1,350	494	1,868	469	327	....	....
Crawford	1,310	94	123,140	....	....	198	423,852	252	656	702	621	11	110
Greene	190	76	14,440	4	5	1	1,200	183	695	295	226	....	....
Guthrie	410	105	43,050	58	124	5	3,860	6,772	24,273	2,231	1,969	....	....
Harrison	913	100	91,300	....	....	6	12,200	11	18	194	764	....	....
Ida	618	92	56,856	....	....	2,996	5,523,050	....	....	164	124	....	....
Monona	852	107	91,164	3	2	2	4,590	140	392	1,447	3,662	....	....
Sac	860	109	93,740	485	1,702	5,160	8,862,453	103	473	99	96	10	100
Shelby	199	80	15,920	166	500	....	....	194	645	576	322	....	....
Woodbury	1,571	108	169,668	10	27	158	240,000	88	255	2,206	6,884	1	10
For District	9,246	101	930,597	1,390	4,140	8,529	15,076,375	9,664	34,736	8,892	15,394	24	240

*Partly estimated.

TABLE NO. 4—Continued

Districts and Counties	Potatoes			Sweet Corn		Pop Corn		Timothy Seed		Clover Seed		Flax Seed	
	Acres	Bushels per acre	Total bushels	Acres	Total tons green corn gathered for canning	Acres	Total pounds	Acres	Total bushels	Acres	Total bushels	Acres	Total bushels
Central—													
Boone	190	81	15,390	191	475	3	4,494	71	374	58	63	....	....
Dallas	110	120	13,200	582	1,406	1	2,930	176	806	635	483	....	....
Grundy	1,483	106	157,198	27	56	....	....	1,148	8,337	282	551	....	....
Hamilton	159	84	13,356	60	191	1	1,900	178	831	48	53	....	....
Hardin	747	117	87,399	246	756	68	173,582	143	1,413	536	532	10	100
Jasper	372	86	31,992	36	73	4	8,450	1,298	6,285	2,991	5,137	....	....
Marshall	560	94	52,640	908	2,535	11	16,930	2,520	14,769	1,484	2,656	....	....
Polk	568	81	46,008	678	1,713	8	12,875	168	712	705	427	....	....
Poweshiek	517	80	41,360	370	1,078	57	146,506	11,478	57,771	2,925	3,537	....	....
Story	82	84	6,888	492	2,751	4	7,700	208	1,207	163	165	....	....
Tama	1,082	97	104,954	933	2,279	13	22,365	4,857	26,523	2,350	3,985	....	....
Webster	469	81	37,989	11	13	2	2,825	93	520	70	43	....	....
For District	6,339	98	608,374	4,534	13,326	172	400,557	22,338	119,548	12,247	17,632	10	100
East Central—													
Benton	771	102	78,642	1,887	5,718	6	12,410	3,758	22,984	883	1,375	....	....
Cedar	430	70	30,100	235	604	7	11,850	3,715	24,105	1,383	1,349	....	....
Clinton	369	96	35,424	....	....	1	1,000	856	4,259	1,131	641	....	....
Iowa	964	106	102,184	585	2,915	4	3,970	5,035	24,408	2,936	5,086	....	....
Jackson	971	113	109,723	6	11	....	....	914	3,607	3,111	2,350	....	....
Johnson	705	100	70,500	308	731	23	16,920	5,035	27,408	2,936	5,086	....	....
Jones	607	108	65,556	....	....	1	2,285	840	4,614	936	704	....	....
Linn	844	95	80,180	252	474	247	621,520	1,586	7,376	1,949	1,548	....	....
*Muscatine	640	73	46,720	6	7	....	....	1,084	5,604	766	704	....	....
Scott	1,812	74	134,088	26	14	8	3,450	443	2,094	1,515	1,628	....	....
For District	8,113	95	753,117	3,305	10,474	297	673,405	42,043	205,475	17,565	20,201	....	....

Southwest—												
Adair	602	90	54,180	9	35	7	7,210	4,737	17,250	2,048	1,725	....	....
Adams	283	104	29,432	31	41	6	9,400	1,336	5,655	1,135	764	....	....
*Cass	643	106	68,158	508	1,409	7	13,820	732	2,875	1,657	1,279	....	....
Fremont	426	88	37,488	478	1,215	2	3,000	80	205	208	208	....	....
Mills	525	85	44,625	5	17	3	5,710	23	70	337	268	....	....
Montgomery	347	88	30,536	388	1,252	9	10,689	220	820	758	683	....	....
Page	530	68	36,040	....	....	2	2,060	336	1,315	487	318	....	....
Pottawattamie	1,948	76	148,048	4	6	2	6,500	256	981	337	490	....	....
Taylor	395	74	29,230	....	....	8	16,310	4,076	19,547	521	372	....	....
For District	5,699	86	477,737	1,423	3,975	46	74,699	11,796	48,718	7,488	6,107	....	....
South Central—													
Appanoose	149	88	13,112	60	166	5	5,472	10,441	39,206	390	494	....	....
Clarke	161	125	20,125	....	....	17	12,980	10,551	42,237	1,093	881	....	....
Decatur	113	109	12,317	....	....	4	8,890	12,794	47,193	481	437	....	....
Lucas	94	67	6,208	5	18	6	10,355	9,963	38,089	1,706	1,370	....	....
Madison	315	136	42,840	102	201	3	7,750	2,101	9,000	1,159	957	....	....
Marion	212	88	18,656	230	596	2	2,775	764	3,277	1,326	1,156	....	....
Monroe	106	75	7,950	3	4	6	6,820	1,856	7,336	818	613	....	....
Ringgold	135	75	10,125	....	....	1	1,960	9,514	32,481	584	409	....	....
Union	554	84	46,536	1	3	8	13,393	7,404	29,449	1,687	1,471	....	....
Warren	229	102	23,358	3	2	4	5,010	2,058	10,505	1,316	1,191	....	....
Wayne	77	91	7,007	....	....	6	8,611	24,671	82,384	2,196	2,770	....	....
For District	2,145	97	208,234	404	990	62	84,016	92,117	341,157	12,756	11,749	....	....
Southeast—													
Davis	269	93	25,017	19	57	4	6,010	12,907	36,426	1,168	1,129	....	....
Des Moines	522	78	40,716	2	3	2	2,510	1,886	10,824	3,701	2,652	....	....
*Henry	390	45	17,550	159	420	2	4,220	1,154	6,209	4,236	3,798	....	....
Jefferson	290	77	22,330	....	....	3	6,345	2,849	13,714	6,072	5,157	....	....
Keokuk	585	75	43,875	11	10	8	9,100	2,958	13,597	3,273	3,106	....	....
*Lee	737	102	75,174	114	248	1	1,650	5,175	26,530	4,536	3,300	....	....
Louisa	266	73	19,418	1,141	3,333	6	3,110	1,370	6,669	1,024	1,208	....	....
Mahaska	475	118	56,050	113	339	3	4,675	441	2,459	1,850	1,790	....	....
Van Buren	153	78	11,934	....	....	2	1,440	5,438	15,967	4,380	4,355	....	....
Wapello	334	40	13,360	15	45	....	....	835	3,203	1,888	1,908	....	....
Washington	379	67	25,393	....	....	4	4,000	1,896	7,927	5,227	6,730	....	....
For District	4,400	80	350,817	1,574	4,455	35	43,060	36,909	143,525	37,355	35,133	....	....
For State	69,443	104.9	7,286,840	20,250	56,926	9,798	17,365,825	263,248	1,104,172	117,917	128,431	5,723	59,795

*Partly estimated.

TABLE NO. 5

Live stock and poultry on farms January 1, 1923; also number of cows and heifers kept for milk, on farms January 1, 1923; swine on farms July 1, 1922; number of sows bred for spring pigs, 1923; number of sheep shipped in for feeding during 1922 and number of pounds of wool clipped, and number of dozen eggs received in 1922; all by counties.

Districts and Counties	Horses			Mules	Swine			Cattle			Sheep			Poultry	
	(All ages) Total No. Jan. 1, 1923	Stallions. total No. Jan. 1, 1923	Jacks, total No. Jan. 1, 1923	(All ages) total No. Jan. 1 1923	Total number on farms July 1 1922	Total number on farms Jan. 1, 1923	Number of sows bred for spring pigs, 1923	Cows and heifers kept for milk Jan 1, 1923	Other cattle not kept for milk Jan. 1, 1923	Total cattle (all ages) Jan. 1, 1923	(All ages) on farms Jan. 1, 1923	Shipped in for feeding during 1922	Total pounds of wool clipped during 1922	Total number all varieties on farms Jan. 1, 1923	Number of doz. eggs received during 1922 (estimated)
Northwest—															
Buena Vista	12,107	15	2	630	142,615	117,053	31,231	10,196	33,248	43,444	1,787	102	15,769	282,652	1,102,516
Cherokee	11,966	21	3	500	176,792	139,737	40,502	7,880	37,880	45,760	1,781	710	7,845	253,952	1,725,961
Clay	11,753	15	1	478	124,076	99,966	28,702	11,087	32,189	43,276	2,942	878	21,386	256,193	1,002,448
Dickinson	7,325	12	6	437	65,400	51,487	14,699	7,948	16,936	24,884	2,093	13	17,049	147,854	576,987
Emmet	8,293	22	4	459	67,562	51,661	14,687	9,265	16,702	25,967	1,615	228	7,857	161,394	532,106
Lyon	12,717	14	....	123	131,278	100,942	34,572	12,313	34,016	46,329	1,235	1,299	4,197	253,698	1,105,267
O'Brien	12,624	20	7	508	151,236	127,141	35,370	12,126	36,239	48,365	2,193	8	15,869	271,310	1,134,528
Osceola	8,708	6	1	230	78,815	64,580	18,804	8,990	20,496	29,486	3,184	314	20,286	178,573	695,155
Palo Alto	11,091	14	7	480	89,810	71,298	21,844	11,525	19,555	31,080	2,163	514	14,771	254,096	1,018,655
Plymouth	18,353	17	3	815	245,013	209,392	69,860	14,734	60,160	74,894	8,553	6,616	20,537	420,113	1,658,120
Pocahontas	13,274	20	5	714	106,015	85,128	22,554	9,440	21,230	30,670	1,791	350	12,443	312,314	1,228,159
Sioux	17,542	33	1	398	225,578	178,810	62,027	19,974	50,786	70,760	2,828	878	15,517	455,217	1,616,226
For District	145,753	209	40	5,772	1,604,190	1,297,195	394,852	135,478	379,437	514,915	32,165	11,910	173,526	3,247,366	13,396,128
North Central—															
Butler	13,033	16	7	202	103,291	84,382	24,909	17,922	32,900	50,822	4,968	325	36,038	401,210	1,555,874
Cerro Gordo	11,700	28	8	300	99,749	77,139	23,752	16,201	29,675	45,876	4,126	92	24,494	281,499	1,125,977
Floyd	11,036	9	....	192	89,283	73,113	19,507	12,432	28,528	40,960	4,686	340	36,023	315,300	1,230,468
Franklin	13,204	20	3	455	130,507	103,887	29,160	14,788	39,132	53,920	8,019	5,987	18,580	354,884	1,388,973
Hancock	11,765	23	3	416	92,067	67,595	21,216	13,784	25,410	39,194	1,394	29	10,977	299,000	1,164,510
Humboldt	9,364	10	3	359	93,753	77,345	20,794	8,585	20,044	28,629	2,527	1,589	9,179	211,305	806,756
Kossuth	21,082	31	5	609	170,631	143,976	40,953	22,011	39,576	61,587	2,833	1,066	15,574	519,327	1,997,237
Mitchell	9,754	13	1	171	80,720	64,953	17,756	13,334	30,556	43,890	2,595	95	17,087	242,772	948,431
Winnebago	9,014	9	4	266	81,895	61,740	17,168	14,143	17,917	32,060	1,569	73	10,823	249,543	975,715
Worth	8,563	9	4	97	69,150	58,842	15,639	14,796	21,818	36,614	1,388	164	9,832	220,285	877,989
Wright	12,819	10	13	512	112,127	96,258	25,071	11,309	26,046	37,355	2,893	836	19,440	276,490	1,025,279
For District	131,334	178	51	3,579	1,123,173	909,230	255,925	159,305	311,602	470,907	36,998	10,596	208,047	3,371,615	13,097,209

Northeast—															
Allamakee	9,919	24	3	103	83,789	53,941	17,968	20,602	32,897	53,499	4,895	524	37,686	254,389	1,009,893
Black Hawk	11,425	15	4	288	115,757	98,449	25,743	18,523	31,592	50,115	3,179	52	21,695	344,036	1,424,209
Bremer	9,906	15	4	174	85,139	67,885	19,204	22,621	17,397	40,018	2,007	80	14,014	347,969	1,339,652
Buchanan	11,864	18	3	601	109,500	92,849	21,853	17,514	28,882	46,396	4,318	200	31,561	351,354	1,307,387
*Chickasaw	10,531	14	3	62	81,455	60,133	17,749	19,497	25,310	44,807	4,295	97	17,559	295,678	1,154,765
Clayton	15,108	21	2	264	161,929	84,345	33,349	29,785	37,712	67,497	5,377	476	39,349	437,661	1,768,967
Delaware	12,455	12	9	405	135,941	94,500	28,270	23,146	23,756	46,902	3,791	312	29,944	345,510	1,350,228
Dubuque	10,581	13	2	253	122,305	63,671	24,313	21,269	27,122	48,391	3,773	388	31,761	278,060	1,079,729
Fayette	14,198	12	4	336	122,334	90,344	25,564	29,887	34,383	64,270	6,377	227	40,570	469,102	1,880,240
Howard	9,304	11	3	148	73,316	49,500	14,923	17,871	25,790	43,661	3,264	72	21,975	247,487	978,846
Winneshiek	14,717	25	1	195	142,616	88,528	30,189	28,640	39,891	68,531	7,464	466	50,410	391,959	1,602,900
For District	130,008	180	38	2,829	1,234,081	844,145	259,125	249,355	324,732	574,087	48,740	2,894	336,524	3,763,205	14,896,816
West Central—															
Audubon	10,639	19	5	559	111,228	92,665	25,318	9,952	36,464	46,416	5,927	6,681	13,420	276,368	1,132,397
Calhoun	12,939	19	7	991	93,892	72,430	19,951	8,423	18,608	27,031	1,394	639	7,799	313,938	1,270,928
Carroll	12,000	11	6	872	136,610	97,678	33,109	11,261	34,852	46,113	3,006	1,293	15,916	356,737	1,393,175
Crawford	15,140	12	8	1,188	215,780	162,005	51,057	12,904	56,907	69,811	4,973	1,839	8,164	376,174	1,358,267
Greene	13,274	21	7	958	96,998	74,966	20,905	7,996	25,458	33,454	3,520	108	24,893	302,401	1,115,551
Guthrie	12,307	22	13	1,185	123,502	105,062	25,992	10,051	36,537	46,588	5,471	8,514	33,961	309,489	1,173,341
Harrison	13,775	19	19	2,237	136,633	112,561	30,206	11,097	32,123	43,220	2,769	2,840	13,217	344,510	1,333,187
Ida	10,191	15	3	921	149,844	123,688	32,690	5,680	33,914	39,594	1,639	6,730	4,951	211,940	842,467
Monona	12,436	14	9	1,885	127,246	115,724	28,974	9,060	30,257	39,317	592	666	3,321	266,827	1,074,608
Sac	13,322	18	1	1,022	147,339	111,666	32,972	8,553	41,104	49,657	3,817	5,212	24,006	300,243	1,167,783
Shelby	13,329	26	11	1,187	170,504	130,905	38,769	8,566	47,269	55,835	6,025	3,688	26,205	326,538	1,360,682
Woodbury	17,441	16	11	1,598	189,018	155,866	43,913	13,888	51,209	64,597	5,698	3,349	36,077	311,921	1,253,179
For District	156,793	212	100	14,603	1,698,594	1,355,216	383,856	116,931	444,702	561,633	44,831	41,559	211,930	3,697,086	14,475,565
Central—															
Boone	12,199	37	8	1,038	96,797	81,023	20,883	10,880	25,632	36,512	2,823	1,070	11,016	361,798	1,469,985
Dallas	11,972	23	4	1,401	123,523	105,917	26,011	9,245	31,952	41,197	5,357	670	33,907	330,791	1,287,360
Grundy	10,991	18	3	325	120,483	84,991	26,500	12,369	38,063	50,432	2,157	620	15,950	331,935	1,363,198
Hamilton	13,775	9	4	677	130,185	103,575	28,099	11,090	28,489	39,579	1,742	194	13,042	350,504	1,356,364
Hardin	11,871	11	1	680	122,050	98,806	27,969	12,945	34,702	47,647	3,517	5,377	26,866	360,323	1,383,402
Jasper	15,343	29	8	1,436	179,960	164,660	39,766	10,835	49,405	60,240	8,015	1,886	52,769	434,555	1,688,024
Marshall	13,376	20	11	771	133,318	119,990	29,135	12,106	40,148	52,254	7,494	4,753	40,782	342,207	1,336,852
Polk	11,141	44	22	1,280	86,722	69,018	7,427	11,403	22,198	33,601	4,781	3,156	20,863	327,902	1,288,610
Poweshiek	13,057	19	7	1,262	157,853	140,728	32,169	10,896	43,195	54,091	7,267	1,837	43,977	336,387	1,340,199
Story	12,705	38	7	876	104,080	88,242	22,540	11,170	27,051	38,221	1,722	505	11,016	370,938	1,461,816
Tama	15,307	27	9	592	171,153	131,733	38,861	12,697	54,767	67,464	7,436	3,867	39,319	437,144	1,661,070
Webster	15,039	25	7	606	98,131	76,132	22,915	11,628	24,245	35,873	1,444	197	10,394	351,740	1,418,269
For District	156,776	300	91	10,944	1,524,255	1,264,815	332,275	137,264	419,847	557,111	53,755	24,132	319,901	4,336,224	17,055,185

*Partly estimated.

TABLE NO. 5—Continued

Districts and Counties	Horses			Mules	Swine			Cattle			Sheep			Poultry	
	(All ages) Total No. Jan. 1, 1923	Stallions, total No. Jan. 1, 1923	Jacks, total No. Jan. 1, 1923	(All ages) total No. Jan. 1, 1923	Total number on farms July 1, 1922	Total number on farms Jan. 1, 1923	Number of sows bred for spring pigs, 1923	Cows and heifers kept for milk Jan. 1, 1923	Other cattle not kept for milk Jan. 1, 1923	Total cattle (all ages) Jan. 1, 1923	(All ages) on farms Jan. 1, 1923	Shipped in for feeding during 1923	Total pounds of wool clipped during 1922	Total number all varieties on farms Jan. 1, 1923	Number of doz. eggs received during 1922 (estimated)
East Central—															
Benton	16,094	30	11	819	159,024	129,827	36,219	13,592	49,212	62,804	5,212	319	36,868	374,359	1,429,077
Cedar	12,742	19	8	1,201	203,420	158,824	39,982	11,186	40,747	51,933	10,737	9,234	54,312	331,925	1,281,854
Clinton	14,693	9	2	382	179,397	106,546	40,608	18,207	41,608	59,815	3,747	3,413	12,553	371,791	1,376,512
Iowa	12,397	23	9	1,351	165,202	139,205	35,017	9,952	42,463	52,415	6,885	2,121	37,703	364,608	1,415,980
Jackson	9,861	21	7	389	112,969	59,704	23,593	17,606	30,711	48,317	3,266	165	24,113	283,279	1,096,170
Johnson	12,957	33	11	1,316	173,673	140,200	32,675	9,409	37,492	46,901	7,525	109	56,530	398,084	1,544,671
Jones	10,552	4	5	457	139,555	95,486	29,459	17,313	35,489	52,802	3,835	708	28,964	336,640	1,284,695
Linn	15,254	37	16	962	147,413	125,991	29,565	18,386	34,268	52,654	5,904	636	41,074	463,451	1,859,601
*Muscatine	8,544	9	7	730	99,629	81,231	19,218	8,050	22,287	30,337	1,777	20	10,771	217,244	859,117
Scott	10,078	16	3	617	124,938	85,050	27,730	14,948	24,164	39,112	1,442	....	11,567	301,512	1,205,922
For District	123,172	201	79	8,224	1,505,220	1,122,064	314,066	138,649	358,441	497,090	50,330	16,725	314,455	3,442,893	13,353,599
Southwest—															
Adair	11,834	27	8	1,483	142,775	121,112	27,700	9,085	41,439	50,524	9,649	838	68,503	308,005	1,232,322
Adams	9,338	21	10	1,205	99,710	87,741	20,663	6,056	32,197	38,253	9,448	435	69,168	252,044	966,480
*Cass	12,398	25	14	1,642	128,450	114,258	28,070	8,327	40,239	48,566	8,612	991	65,833	296,976	1,147,420
Fremont	8,182	16	8	2,234	86,788	72,832	18,871	5,124	23,530	28,654	3,144	7,313	22,242	201,481	871,989
Mills	8,743	16	6	1,262	86,739	77,998	20,001	5,919	24,645	30,564	2,700	914	6,362	190,197	744,419
Montgomery	9,181	12	8	1,563	120,452	102,881	25,470	6,247	30,101	36,348	1,261	517	13,028	222,180	870,916
Page	11,539	21	11	2,197	137,520	122,624	30,004	7,912	37,057	44,969	3,505	845	23,372	306,957	1,203,875
Pottawattamie	18,295	80	18	2,624	234,167	191,900	53,501	13,217	73,230	86,447	4,130	1,410	26,920	447,991	1,757,737
Taylor	11,250	17	9	1,538	115,073	96,274	20,498	7,125	31,089	38,214	12,544	2,027	75,021	323,841	1,278,076
For District	100,760	235	92	15,748	1,151,674	987,620	244,778	69,012	332,527	402,539	54,993	15,290	370,449	2,549,672	10,073,234

South Central—															
Appanoose	8,201	13	14	1,388	44,275	39,406	8,038	8,593	20,614	29,207	19,427	290	119,083	263,029	984,493
Clarke	7,204	15	7	1,028	68,074	62,820	12,037	5,747	24,734	30,481	4,777	....	40,928	211,454	873,063
Decatur	8,938	19	9	1,709	107,331	59,220	12,558	7,688	25,020	32,708	9,212	797	59,068	296,257	1,175,986
Lucas	7,769	27	7	1,191	55,061	49,792	10,216	6,660	22,006	28,666	14,252	3,253	75,868	236,377	928,650
Madison	11,218	21	21	1,081	125,413	112,646	24,220	8,409	35,651	44,060	12,204	2,255	74,140	306,473	1,226,387
Marion	11,132	13	9	1,513	117,320	94,101	21,676	8,310	30,441	38,751	20,425	57,674	83,698	369,199	1,495,919
Monroe	6,374	13	10	1,221	43,680	39,921	8,087	7,158	17,613	24,771	9,473	....	63,964	192,553	751,658
Ringgold	10,028	19	13	1,773	82,380	72,469	16,407	8,514	29,983	38,497	10,762	824	72,834	321,059	1,321,017
Union	8,417	28	17	1,106	72,931	65,200	13,951	6,813	28,428	35,241	5,861	860	38,605	246,281	976,936
Warren	10,495	25	11	1,246	101,197	90,514	18,872	9,032	30,679	39,711	8,608	3,130	46,946	302,590	1,191,181
Wayne	9,279	18	6	1,859	70,926	65,189	13,494	6,362	30,465	36,827	10,431	2,007	59,597	266,903	1,035,377
For District	99,055	211	124	15,115	888,588	751,278	150,556	83,286	295,634	378,920	125,432	71,090	734,731	3,012,175	11,960,667
Southeast—															
Davis	8,123	14	8	1,066	53,038	42,179	9,349	9,188	19,837	29,025	60,636	1,113	422,956	319,888	1,266,635
Des Moines	8,434	8	3	577	76,071	71,625	14,185	7,547	18,400	25,947	3,933	630	21,276	259,134	1,674,692
*Henry	9,443	16	5	935	86,168	73,904	15,392	7,008	23,103	30,111	15,887	1,207	93,020	284,241	1,121,259
Jefferson	9,301	14	5	719	76,300	70,804	12,870	6,904	19,129	26,033	10,966	338	69,737	277,923	1,087,396
Keokuk	13,825	39	18	1,960	148,961	134,041	27,614	9,817	29,716	39,533	11,358	1,981	69,459	412,586	1,650,718
*Lee	9,431	20	17	963	58,373	52,565	9,929	9,288	19,728	29,016	18,231	499	130,037	299,221	1,191,632
Louisa	7,472	11	3	516	83,308	76,882	16,302	4,446	21,041	25,487	2,064	733	16,612	200,888	749,105
Mahaska	13,060	38	18	1,553	155,135	138,768	31,341	10,739	30,371	41,110	20,358	2,741	115,581	403,334	1,605,733
Van Buren	8,690	31	6	1,073	60,842	52,922	10,628	7,349	20,035	27,384	29,480	773	226,165	308,226	1,242,994
Wapello	7,339	7	14	991	73,642	65,091	12,929	8,269	14,354	22,623	12,705	....	85,641	236,628	965,835
Washington	13,023	25	9	1,512	164,913	151,293	29,668	7,078	33,535	40,613	7,058	1,396	42,663	367,684	1,539,021
For District	108,141	223	106	11,895	1,036,751	930,074	190,207	87,633	249,249	336,882	192,676	11,411	1,293,147	3,369,753	14,095,020
For State	1,151,792	1,949	721	88,709	11,766,526	9,461,637	2,534,640	1,176,913	3,117,171	4,294,084	639,920	205,607	3,962,710	30,789,989	122,403,423

*Partly estimated.

TABLE NO. 6

Comparative table showing number of swine lost by cholera in Iowa in 1922, 1921, 1920, 1919, 1918, 1917, 1916, 1915 and 1913, by counties.

Districts and Counties	Swine lost by cholera, 1922	Swine lost by cholera, 1921	Swine lost by cholera, 1920	Swine lost by cholera, 1919	Swine lost by cholera, 1918	Swine lost by cholera, 1917	Swine lost by cholera, 1916	Swine lost by cholera, 1915	Swine lost by cholera, 1913
Northwest—									
Buena Vista	6,538	10,942	4,557	3,075	4,252	1,408	5,114	3,482	68,286
Cherokee	8,638	10,686	4,893	15,995	4,055	1,895	4,497	5,003	63,223
Clay	3,592	7,026	1,705	2,253	1,714	1,912	2,420	1,453	31,875
Dickinson	784	1,738	480	1,466	509	333	731	868	17,716
Emmet	2,588	4,721	908	2,126	2,001	978	1,679	1,873	18,505
Lyon	4,992	15,276	4,674	5,688	3,408	5,226	4,886	5,701	70,181
O'Brien	4,564	5,362	5,170	3,251	2,490	2,179	4,761	2,635	58,865
Osceola	1,646	2,038	1,648	2,734	1,036	1,066	824	399	36,620
Palo Alto	3,038	4,238	2,561	3,123	2,338	2,017	3,779	1,701	46,260
Plymouth	14,741	15,698	9,855	19,067	8,050	6,748	10,610	6,875	105,055
Pocahontas	4,975	7.446	3,756	3,283	4,701	1,469	3,469	2,318	38,651
Sioux	9,767	20,208	8,450	8,363	12,025	6,192	13,587	11,570	123,101
For District	65,833	105,379	48,657	70,424	46,579	31,423	56,357	43,878	678,338
North Central—									
Butler	878	2,007	1,472	962	541	277	553	1,261	37,211
Cerro Gordo	2,105	2,223	1,840	1,429	1,955	360	1,368	1,239	43,255
Floyd	225	952	1,771	531	1,239	832	470	882	18,046
Franklin	3,328	5,374	2,174	2,068	2,520	999	896	5,690	31,367
Hancock	2,798	3,736	3,332	1,554	1,369	285	284	1,656	38,672
Humboldt	3,455	3,755	1,868	1,970	1,966	1,142	3,129	2,372	46,225
Kossuth	3,302	9,428	5,898	7,344	7,185	2,429	2,707	2,757	78,295
Mitchell	674	611	88	84	....	234	174	1,368	13,810
Winnebago	814	714	550	1,429	607	494	186	2,179	14,639
Worth	1,396	2,658	532	881	137	439	317	1,503	16,427
Wright	1,320	5,386	914	3,677	3,568	1,616	1,134	2,216	49,718
For District	20,295	36,844	20,439	21,929	21,087	9,107	11,218	23,123	387,665
Northeast—									
Allamakee	63	171	58	461	....	7	17	86	993
Black Hawk	4,216	4,385	3,290	3,089	1,436	2,375	1,061	5,422	26,480
Bremer	938	755	565	514	313	309	126	2,303	8,250
Buchanan	3,389	2,562	2,028	1,012	728	244	5	434	22,117
*Chickasaw	275	1,033	191	379	214	....	111	2,007	16,595
Clayton	1,289	1,442	546	1,105	326	....	654	760	1,700
Delaware	1,792	1,725	2,390	1,517	1,047	2,175	374	1,255	33,348
Dubuque	2,859	2,517	566	911	1,031	927	1,557	4,257	23,299
Fayette	693	480	202	337	197	120	351	528	6,158
Howard	1,901	1,022	625	415	185	5	60	1,073	7,223
Winneshiek	739	71	184	612	104	333	2,224	1,999	3,543
For District	18,154	16,163	10,645	10,352	5,581	6,495	6,540	20,124	149,706
West Central—									
Audubon	2,200	1,897	617	2,327	2,777	1,715	2,557	3,628	29,716
Calhoun	1,842	8,183	1,829	720	1,463	1,360	1,865	1,578	23,755
Carroll	8,792	5,630	5,883	3,148	980	2,365	4,051	4,477	39,318
Crawford	12,941	8,635	5,414	5,881	4,963	5,343	9,354	9,648	71,865
Greene	4,714	4,337	1,263	2,362	1,819	3,556	1,829	1,790	26,568
Guthrie	3,795	3,293	2,871	4,696	3,677	1,630	3,460	3,050	30,932
Harrison	6,926	3,213	2,099	5,467	4,589	2,243	4,084	7,872	20,122
Ida	13,403	9,882	5,588	5,437	3,560	3,634	3,031	4,168	52,358
Monona	5,421	6,882	2,605	5,277	2,185	1,853	1,574	4,961	37,085
Sac	7,048	10,653	2,436	3,519	2,051	1,601	4,966	4,691	67,715
Shelby	9,245	2,620	2,863	3,922	2,645	2,593	3,462	7,120	25,118
Woodbury	10,488	11,799	5,658	12,385	14,749	7,707	6,624	9,819	61,998
For District	86,815	77,024	39,126	55,141	45,458	35,600	46,857	62,802	486,550

*Partly estimated.

TABLE NO. 6—Continued

Comparative table showing number of swine lost by cholera in Iowa in 1922, 1921, 1920, 1919, 1918, 1917, 1916, 1915 and 1913, by counties.

Districts and Counties	Swine lost by cholera, 1922	Swine lost by cholera, 1921	Swine lost by cholera, 1920	Swine lost by cholera, 1919	Swine lost by cholera, 1918	Swine lost by cholera, 1917	Swine lost by cholera, 1916	Swine lost by cholera, 1915	Swine lost by cholera, 1913
Central—									
Boone	2,545	6,048	3,247	862	1,256	774	2,765	1,706	26,810
Dallas	7,951	5,116	922	1,707	4,963	1,902	1,678	2,311	18,436
Grundy	1,619	3,155	2,506	5,622	1,439	2,599	1,031	2,962	23,618
Hamilton	5,055	7,068	3,315	2,481	3,119	3,216	2,294	2,385	35,526
Hardin	3,436	6,156	5,695	1,824	2,039	1,777	2,292	5,707	28,015
Jasper	4,351	7,459	7,874	7,874	6,139	6,400	3,207	9,380	48,499
Marshall	4,600	9,737	4,987	9,079	1,219	2,000	4,642	6,454	48,293
Polk	7,227	5,559	1,939	3,706	3,483	3,276	3,117	4,648	20,937
Poweshiek	5,744	4,873	3,379	1,317	2,141	1,622	2,035	8,301	24,902
Story	3,754	9,525	5,436	3,938	3,155	2,458	4,032	3,118	27,672
Tama	6,417	10,549	2,921	5,109	2,683	3,897	3,175	8,148	31,407
Webster	3,354	5,553	4,820	146	1,598	499	2,284	1,697	40,381
For District	56,053	80,798	47,041	43,665	33,234	30,420	32,552	56,817	374,496
East Central—									
Benton	3,853	4,362	1,712	2,680	1,775	7,918	3,025	5,994	25,770
Cedar	14,727	4,500	5,929	7,743	4,798	4,723	5,281	12,407	42,729
Clinton	1,081	2,677	2,940	2,243	1,019	131	889	2,198	19,999
Iowa	6,397	4,456	4,119	4,897	2,810	2,035	4,250	8,939	3,656
Jackson	683	656	....	244	90	180	322	1,453	3,502
Johnson	8,025	5,493	4,811	6,916	6,448	3,079	4,519	14,139	17,646
Jones	3,050	865	1,524	1,395	779	1,883	1,007	4,563	9,470
Linn	3,681	3,798	1,333	3,811	1,754	1,124	1,463	3,186	24,196
*Muscatine	4,994	7,012	3,593	4,265	2,380	718	2,372	4,276	11,702
Scott	1,137	2,190	5,044	13,937	3,320	1,098	3,104	4,061	21,860
For District	47,628	36,009	31,005	48,131	25,173	22,889	26,232	61,216	180,530
Southwest—									
Adair	7,156	6,464	2,653	1,330	2,517	2,652	2,679	5,791	32,151
Adams	3,105	1,731	2,502	1,429	1,576	1,437	2,510	6,378	12,080
*Cass	5,482	3,944	3,817	3,578	6,659	2,434	5,231	9,279	42,266
Fremont	5,432	5,687	2,153	2,779	4,147	3,622	2,836	7,065	7,271
Mills	3,829	3,273	1,452	6,617	2,784	1,879	2,153	4,249	16,632
Montgomery	6,062	2,177	2,838	2,602	2,820	2,816	2,461	6,882	28,403
Page	6,597	3,254	1,026	1,528	1,860	4,181	3,711	15,192	30,809
Pottawattamie	11,750	6,907	6,375	6,991	8,294	9,542	12,164	21,376	42,065
Taylor	3,531	1,224	1,446	1,304	1,032	1,876	760	5,031	18,062
For District	52,944	34,661	24,262	28,158	31,689	30,439	34,505	81,243	229,739
South Central—									
Appanoose	349	1,519	898	802	168	587	159	803	1,933
Clarke	1,554	2,080	1,195	671	304	692	537	2,818	4,918
Decatur	889	498	579	203	324	294	835	2,901	1,237
Lucas	1,099	1,230	97	675	704	32	203	2,523	1,001
Madison	5,577	5,848	1,916	1,700	6,332	1,110	1,712	6,305	16,584
Marion	5,128	7,947	2,568	4,532	7,531	3,159	3,063	8,491	27,030
Monroe	793	636	182	35	141	86	33	1,313	1,644
Ringgold	513	28	32	244	157	263	135	2,066	8,625
Union	3,139	1,612	1,229	576	629	978	1,015	3,585	7,377
Warren	4,536	2,648	914	2,552	783	806	848	4,486	18,270
Wayne	1,267	1,572	1,016	252	513	89	222	3,245	10,487
For District	24,844	25,618	10,626	12,242	17,586	8,096	8,762	38,536	99,106

*Partly estimated.

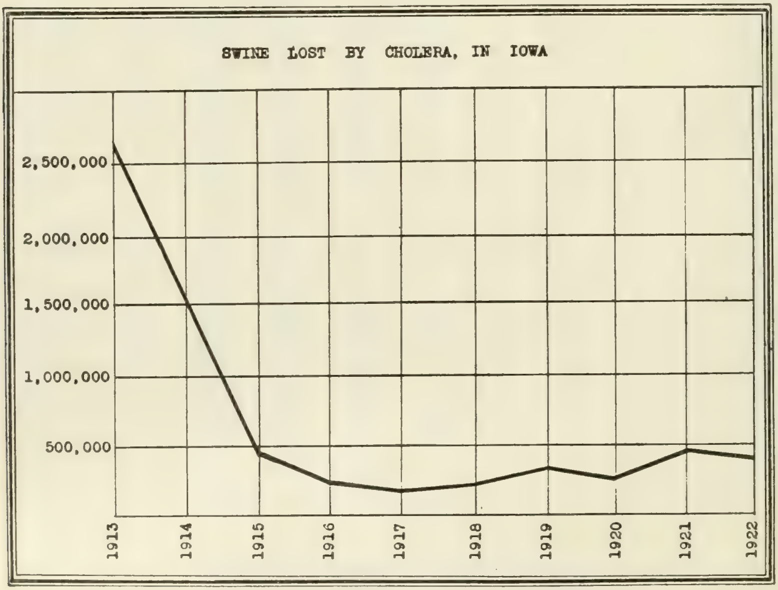
TABLE NO. 6—Continued

Comparative table showing number of swine lost by cholera in Iowa in 1922, 1921, 1920, 1919, 1918, 1917, 1916, 1915 and 1913, by counties.

Districts and Counties	Swine lost by cholera, 1922	Swine lost by cholera, 1921	Swine lost by cholera, 1920	Swine lost by cholera, 1919	Swine lost by cholera, 1918	Swine lost by cholera, 1917	Swine lost by cholera, 1916	Swine lost by cholera, 1915	Swine lost by cholera, 1913
Southeast—									
Davis	262	504	170	218	46	....	66	1,704	280
Des Moines	1,573	3,141	1,266	4,502	1,679	988	1,731	7,180	9,353
*Henry	1,550	3,654	1,239	1,018	901	675	977	5,033	2,861
Jefferson	644	1,926	857	1,552	1,058	129	506	3,719	3,207
Keokuk	9,864	4,154	5,830	6,614	1,693	658	2,131	13,659	20,620
*Lee	867	1,137	452	263	469	143	354	3,860	6,978
Louisa	3,067	7,445	4,626	3,697	2,382	2,167	6,320	11,129	12,665
Mahaska	6,531	9,165	7,806	8,666	4,054	2,791	4,311	21,574	30,899
Van Buren	1,239	501	365	479	134	5	712	2,785	2,844
Wapello	4,766	2,628	1,356	2,779	984	1,288	1,754	6,634	7,606
Washington	5,573	6,746	5,529	9,197	4,158	5,597	5,917	11,696	24,433
For District	35,936	41,001	29,496	38,985	17,558	14,441	24,779	88,973	121,746
For State	408,502	453,497	261,297	329,027	243,945	188,909	247,802	476,712	2,707,876

*Partly estimated

Hog cholera decreased in 1922 in spite of the increase in hogs. Decreases were largest in the northwest counties where hogs are most numerous and where rainfall was least; and the largest increases appear to be in sections where excessive rains caused overflows that carried the disease from farm to farm. Vaccination campaigns no doubt had much to do with the general decrease in losses from this disease.



PART X

Statistical Tables of Iowa's Principal Farm Crops. Also Statistical Tables of the Principal Farm Crops and Live Stock by States, the United States and the World.

CORN

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1880	5,625,200	41.0	230,633,200	$ .25	$ 57,658,300
1885	6,803,834	33.0	224,636,522	.23	51,666,400
1890	8,550,827	28.0	239,675,156	.41	98,266,814
Statistics compiled from reports of the Iowa Weather and Crop Service					
1896	8,043,390	39.0	313,692,210	.14	43,916,909
1897	8,253,522	29.0	239,452,150	.17	40,706,865
1898	8,396,286	34.5	289,214,850	.23	66,519,415
1899	8,460,521	36,3	306,852,714	.23	70,576,124
1900	8,618,660	40.3	345,055,040	.27	93,164,860
1901	8,687,480	26.2	227,908,850	.50	113,954,425
1902	8,700,000	34.1	296,950,230	.28	83,146,064
1903	7,398,320	31.2	230,511,310	.36	82,984,071
1904	9,000,000	36.0	323,853,330	.35	113,348,665
1905	9,285,150	37.2	345,871,840	.35	121,055,144
1906	9,443,960	41.1	388,348,920	.33	128,155,143
1907	8,327,690	29.6	246,898,460	.44	108,635,322
1908	8,399,610	35.9	301,873,150	.51	153,955,306
Statistics of township assessors; values by Iowa Weather and Crop Service					
1909	8,681,850	35.5	308,036,868	.51	157,098,802
1910	8,399,712	39.8	334,374,428	.36	120,374,794
1911	8,863,331	36.9	326,661,430	.54	176,397,172
1912	9,420,434	44.5	419,097,329	.36	150,875,038
1913	9,180,774	37.3	342,158,425	.59	201,873,470
1914	9,794,437	40.5	397,117,376	.55	218,414,557
1915	9,747,846	27.5	267,903,738	.45	120,556,682
1916	9,479,030	35.0	331,582,186	.81	268,581,571
1917	10,370,727	35.8	371,639,819	.97	360,490,624
1918	9,309,234	34.1	317,544,351	1.23	390,579,552
1919	9,684,651	41.8	404,473,723	1.17	473,234,256
1920	10,254,589	46.0	471,533,116	.47	221,620,564
1921	10,224,987	43.0	440,102,098	.30	132,030,629
1922	10,364,763	45.0	465,915,401	.54	251,594,317
Average for 27 years	9,066,332	36.8	335,356,420	.48	165,327,420

WHEAT

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage all wheat	WINTER WHEAT				SPRING WHEAT				Total yield all wheat bushels	Total value all wheat
		Acres	Average yield per acre bushels	Total yield bushels	Average farm value per bushel, Dec. 1st	Acres	Average yield per acre bushels	Total yield bushels	Average farm value per bushel Dec. 1st		
1880	3,437,948	....	....	....	....	....	10.5	....	$ .82	36,099,760	$ 29,501,803
1885	2,648,009	....	....	....	....	....	12.0	....	.61	31,776,108	19,383,426
1890	2,092,896	....	....	....	....	....	11.7	....	.78	25,114,552	19,589,350
1896	739,245	197,150	17.0	3,351,550	$ .60	542,095	13.0	7,047,235	$ .57	10,398,785	$ 6,027,854
1897	1,094,364	128,573	13.0	1,671,454	.74	965,791	13.4	12,941,600	.74	14,613,054	10,813,660
1898	1,484,682	191,451	16.5	3,168,916	.55	1,293,231	14.8	19,152,352	.52	22,321,268	11,702,127
1899	1,566,818	27,427	11.3	226,040	.58	1,539,391	12.7	19,574,792	.54	19,800,832	10,701,491
1900	1,494,748	76,547	13.3	1,018,070	.62	1,418,201	14.3	20,280,280	.60	21,298,350	12,799,371
1901	1,188,457	49,192	17.6	865,770	.60	1,139,265	15.3	17,429,230	.60	18,295,000	10,977,000
1902	1,022,782	47,336	18.0	852,045	.55	975,446	13.0	12,680,800	.52	13,535,845	7,062,641
1903	837,422	84,934	16.9	1,435,380	.70	752,488	12.6	9,481,350	.65	10,916,730	7,167,644
1904	846,070	71,030	14.3	1,017,000	.92	775,040	9.1	7,080,430	.86	8,097,430	7,024,810
1905	420,069	62,030	20.2	1,253,020	.72	358,039	14.4	5,155,760	.72	6,408,780	4,614,321
1906	439,152	65,560	23.0	1,566,050	.67	373,595	15.0	5,603,880	.63	7,169,930	4,579,698
1907	421,125	85,785	19.8	1,698,101	.83	335,340	13.0	4,402,320	.81	6,100,421	4,975,302
1908	408,614	85,147	19.7	1,678,540	.86	323,467	15.4	4,968,250	.86	6,646,790	5,716,239

WHEAT—Continued

Statistics of township assessors; values by Iowa Weather and Crop Service

1909	502,762	198,970	18.2	3,621,953	.92	303,792	12.5	3,809,460	.90	7,431,413	6,760,711
1910	546,179	196,049	18.5	3,635,405	.86	350,130	19.3	6,773,799	.86	10,409,204	8,951,915
1911	897,803	360,358	17.9	6,451,921	.93	537,445	11.6	6,238,242	.86	12,690,163	11,365,175
1912	887,309	497,938	23.0	11,460,943	.78	389,371	14.6	5,702,539	.76	17,163,482	13,273,466
1913	802,006	525,616	23.2	12,210,812	.77	276,390	15.0	4,137,995	.75	16,348,807	12,505,821
1914*	917,309	617,796	21.6	13,344,394	.97	299,513	13.0	3,893,669	.94	17,238,063	16,604,111
1915	735,055	587,001	18.5	10,872,248	.83	148,054	13.8	2,040,472	.85	12,912,720	10,758,366
1916	468,641	296,220	15.6	4,621,073	1.58	172,421	12.2	2,111,771	1.54	6,732,844	10,553,422
1917	315,923	151,098	14.6	2,211,817	1.97	164,825	19.2	3,177,908	1.94	5,389,725	10,522,420
1918	919,023	308,979	17.7	5,481,167	2.02	610,044	17.3	10,527,209	1.99	16,008,376	32,021,102
1919	1,434,391	864,588	16.9	14,664,756	1.98	569,803	9.2	5,241,421	1.89	19,906,177	38,942,501
1920	595,891	452,200	19.8	8,953,061	1.41	143,691	11.0	1,578,269	1.35	10,531,330	14,754,479
1921	551,617	473,832	19.2	9,086,521	.90	77,785	10.6	822,810	.87	9,909,331	8,893,714
1922	730,637	673,803	23.3	15,620,921	.97	56,834	14.3	814,436	.95	16,435,357	15,926,007
Average for 27 years	824,744	273,208	18.1	5,260,701	$ .96	551,536	13.7	7,506,232	$ .93	12,767,045	$ 11,703,532

*State census; apportionment to winter and spring wheat made on basis of relative acreage and production reported by Iowa Weather and Crop Service

OATS

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st	Total value
1880	1,179,680	35.0	42,288,800	$ .23	$ 9,496,424
1885	2,207,320	32.5	71,737,900	.21	15,064,959
1890	2,758,715	29.0	80,002,735	.38	30,401,039
Statistics compiled from reports of the Iowa Weather and Crop Service					
1896	2,825,000	26.0	73,450,000	.12	8,814,000
1897	4,405,782	30.0	132,571,000	.16	21,211,384
1898	4,299,243	32.5	139,915,340	.21	29,383,220
1899	4,069,557	34.5	140,647,309	.19	26,722,989
1900	3,991,690	34.7	138,832,330	.20	27,766,466
1901	3,799,220	30.2	114,883,530	.35	40,209,235
1902	2,997,031	31.0	92,907,960	.24	22,297,900
1903	3,822,882	25.9	99,012,660	.30	29,703,798
1904	4,018,980	29.4	118,435,570	.26	30,793,284
1905	4,332,522	33.8	146,439,240	.25	36,609,810
1906	4,166,800	34.0	142,036,580	.27	38,349,878
1907	4,536,170	24.5	111,190,400	.39	43,364,256
1908	4,431,650	25.5	112,830,490	.43	48,517,110
Statistics of township assessors; values by Iowa Weather and Crop Service					
1909	4,312,134	27.0	117,083,850	.35	40,979,347
1910	4,697,749	36.0	169,207,098	.27	45,685,916
1911	4,730,687	25.8	122,474,893	.41	50,214,706
1912	4,874,752	42.6	207,819,162	.27	56,111,174
1913	5,205,978	35.4	184,500,993	.34	62,730,338
1914	5,285,440	33.7	178,330,591	.41	73,115,542
1915	4,985,014	37.9	188,720,529	.32	60,390,569
1916	5,199,269	36.5	189,876,501	.49	93,039,485
1917	5,410,031	42.1	227,743,960	.61	138,923,816
1918	5,822,869	39.4	229,233,036	.64	146,709,143
1919	5,565,630	34.7	193,342,151	.64	123,738,977
1920	5,833,474	39.1	227,849,078	.36	82,025,668
1921	6,338,795	26.0	164,647,697	.23	37,868,970
1922	5,874,172	37.1	217,840,669	.34	74,065,827
Average for 27 years	4,660,464	32.8	154,882,319	$ .34	$ 55,160,844

BARLEY

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st	Total value
Statistics compiled from reports of Secretary of Iowa Agricultural Society					
1880	200,000	23.0	4,600,000	$ .42	$ 1,932,000
1885	212,485	27.0	5,737,095	.33	1,893,241
1890	152,682	24.0	3,664,368	.47	1,722,254
Statistics compiled from reports of the Iowa Weather and Crop Service					
1896	547,642	29.0	15,881,618	.20	3,176,324
1897	551,867	25.5	14,076,856	.23	3,237,677
1898	509,589	27.7	14,138,011	.30	4,241,433
1899	557,598	26.4	14,719,311	.30	4,415,579
1900	501,740	25.3	12,695,200	.33	4,189,416
1901	604,610	24.2	14,654,410	.44	6,447,940
1902	594,070	25.0	15,380,940	.33	5,075,710
1903	493,108	24.7	12,179,790	.37	4,506,522
1904	493,370	25.0	12,317,710	.34	4,188,021
1905	565,700	27.5	15,566,770	.33	5,137,034
1906	558,870	26.5	14,858,830	.36	5,349,178
1907	397,210	24.6	9,893,330	.60	5,935,998
1908	397,408	26.7	10,629,660	.50	5,314,830
Statistics of township assessors; values by Iowa Weather and Crop Service					
1909	562,622	18.4	10,352,040	.46	4,761,938
1910	324,571	25.9	8,614,541	.56	4,824,143
1911	313,472	19.5	6,106,239	.90	5,495,615
1912	389,410	28.5	11,100,558	.50	5,550,279
1913	458,743	20.8	9,550,482	.53	5,061,755
1914	300,062	24.9	7,463,395	.56	4,179,501
1915	202,823	31.4	6,359,171	.51	3,243,177
1916	265,048	28.2	7,467,049	.90	6,720,344
1917	305,429	34.6	10,578,090	1.15	12,164,804
1918	537,975	28.4	15,278,490	.89	13,597,856
1919	234,779	24.5	5,749,847	1.11	6,382,330
1920	175,691	27.4	4,809,798	.63	3,030,173
1921	132,091	23.7	3,130,486	.42	1,314,804
1922	161,000	28.6	4,603,591	.52	2,393,867
Average for 27 years	412,463	26.0	10,672,452	$ .53	$ 5,182,822

RYE

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st	Total value
Statistics compiled from reports of Secretary of Iowa Agricultural Society					
1880	41,000	14.0	574,000	$ .38	$ 218,120
1885	114,000	15.0	1,710,000	.42	718,200
1890	100,560	16.0	1,608,960	.51	820,570
Statistics compiled from reports of the Iowa Weather and Crop Service					
1896	121,670	16.0	1,946,720	.25	486,680
1897	226,198	15.0	3,490,344	.34	1,186,716
1898	210,309	16.0	3,370,550	.38	1,280,809
1899	126,236	16.3	2,061,169	.40	824,467
1900	103,680	15.6	1,621,630	.43	697,300
1901	54,390	15.8	859,630	.48	412,622
1902	51,931	17.0	882,830	.40	353,132
1903	123,273	15.6	1,923,060	.44	846,146
1904	99,590	15.0	1,517,090	.54	819,228
1905	71,305	18.0	1,283,500	.52	667,420
1906	62,530	17.5	1,093,160	.48	524,717
1907	52,450	17.0	900,060	.61	549,036
1908	50,893	17.1	869,072	.63	547,515
Statistics of township assessors; values by Iowa Weather and Crop Service					
1909	41,606	13.4	556,846	.60	334,108
1910	29,502	13.8	407,058	.61	248,305
1911	44,157	15.1	668,443	.79	528,070
1912	73,315	18.0	1,322,382	.61	806,653
1913	74,599	15.8	1,179,307	.59	695,791
1914	71,979	14.2	1,025,201	.77	789,405
1915	62,365	14.2	886,473	.77	682,584
1916	36,886	12.5	461,210	1.15	530,392
1917	48,404	14.6	706,594	1.58	1,116,419
1918	69,395	12.4	860,393	1.48	1,273,382
1919	86,901	16.0	1,388,761	1.33	1,847,052
1920	39,268	16.1	631,370	1.17	738,703
1921	38,483	16.2	622,738	.73	454,599
1922	55,310	19.7	1,088,436	.71	772,790
Average for 27 years	78,764	15.7	1,245,334	$ .70	$ 741,261

POTATOES

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st	Total value
1880	107,000	95.0	10,165,000	$ .35	$ 3,557,750
1885	157,000	82.0	12,874,000	.40	5,149,600
1890	170,048	49.0	8,332,352	.81	6,749,205

Statistics compiled from reports of the Iowa Weather and Crop Service

1896	170,285	87.0	14,814,795	.21	3,111,106
1897	163,248	61.6	10,051,919	.45	4,523,363
1898	164,456	76.0	12,538,411	.31	3,886,907
1899	154,243	98.8	15,252,934	.24	3,660,704
1900	149,680	73.0	10,850,900	.40	4,340,360
1901	136,300	37.4	5,098,460	.90	4,588,614
1902	138,484	87.1	12,051,670	.34	4,097,567
1903	113,433	53.8	6,082,694	.75	4,562,020
1904	113,250	125.0	14,255,680	.28	3,991,590
1905	111,335	84.0	9,352,190	.50	4,676,095
1906	115,310	101.0	11,697,500	.48	5,614,800
1907	117,350	84.0	9,847,430	.62	6,105,406
1908	118,517	89.9	10,658,290	.59	6,288,391

Statistics of township assessors; values by Iowa Weather and Crop Service

1909	138,139	90.0	12,427,595	.53	6,586,625
1910	132,640	75.3	9,986,881	.48	4,793,703
1911	117,943	77.0	9,125,747	.71	6,479,280
1912	120,035	93.9	11,277,537	.44	4,962,116
1913	112,314	52.2	5,865,140	.85	4,985,369
1914	85,931	98.4	8,453,843	.58	4,903,229
1915	99,636	82.5	8,218,471	.53	4,355,790
1916	88,691	46.6	4,132,494	1.75	7,231,865
1917	100,246	85.4	8,561,511	1.32	11,301,195
1918	96,656	73.3	7,082,480	1.32	9,348,874
1919	78,381	43.2	3,387,090	1.94	6,570,954
1920	65,560	111.9	7,333,437	1.22	8,946,793
1921	76,252	43.0	3,282,453	1.40	4,595,434
1922	69,443	104.9	7,286,840	.62	4,517,841
Average for 27 years	116,584	79.1	9,221,274	.73	5,519,481

FLAX

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st	Tota value
1880	103,420	10.0	1,034,200	$ 1.00	$ 1,034,200
1885*				.94	2,563,293
1890	283,722	10.5	2,929,081	1.10	3,221,989
Statistics compiled from reports of the Iowa Weather and Crop Service					
1896	199,128	9.5	1,891,716	.60	1,135,029
1897	249,882	10.0	2,498,600	.87	2,173,782
1898	225,014	10.5	2,376,604	.80	1,901,283
1899	142,175	11.2	1,597,979	1.04	1,661,898
1900	108,850	11.2	1,222,980	1.50	1,834,470
1901	104,140	8.8	916,890	1.29	1,182,788
1902	94,767	8.0	755,350	1.00	755,350
1903	40,823	8.7	355,160	.78	277,024
1904	51,370	11.0	591,140	1.15	679,811
1905	17,732	9.8	173,770	.90	156,393
1906	19,160	10.7	205,280	.97	199,122
1907	42,790	10.8	461,960	.98	452,721
1908	40,833	11.3	461,580	1.01	466,195
Statistics of township assessors; values by Iowa Weather and Crop Service					
1909	17,365	10.0	173,650	1.29	224,009
1910	19,821	8.6	170,387	2.28	388,482
1911	39,334	4.6	178,717	2.00	357,434
1912	24,121	9.9	238,442	1.31	312,359
1913	15,462	7.9	121,869	1.36	165,742
1914	15,545	7.4	114,540	1.21	138,593
1915	6,486	6.9	44,743	1.57	70,247
1916	7,658	8.5	65,196	2.06	134,304
1917	8,384	9.9	82,734	2.87	237,447
1918	14,973	8.2	123,077	3.26	401,231
1919	11,372	9.4	107,068	3.90	417,565
1920	10,951	10.5	114,844	1.80	206,749
1921	8,237	8.8	72,775	1.53	111,346
1922	5,723	10.0	59,795	2.07	123,776
Average for 27 years	57,114	9.3	562,105	1.53	598,709

*No other data

HAY

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	†Acreage all hay	†TAME HAY			WILD HAY			†Total yield all hay, tons	†Total value all hay
		Average yield per acre, tons	Total yield, tons	Average farm value per ton December 1st.	Average yield per acre, tons	Total yield, tons	Average farm value per ton, December 1st.		
*1880	....	....	....	....	....	....	....	....	....
*1885	....	....	....	....	....	....	....	....	....
1890	3,327,577	1.5	4,991,335	$ 6.84	....	....	....	....	$ 34,140,731

Statistics compiled from reports of the Iowa Weather and Crop Service

1896	3,800,960	1.5	3,376,440	4.50	1.5	2,325,000	$ 3.30	5,701,440	22,866,480
1897	3,593,060	1.6	3,362,287	4.50	1.3	1,939,117	3.70	5.301,404	22,305,025
1898	3,637,395	1.7	3,852,561	4.30	1.2	1,645,419	3.50	5.497,980	22,324,978
1899	3,742,655	1.5	3,852,941	5.75	1.2	1,458,195	4.90	5,311,136	29,299,567
1900	3,597,137	1.4	3,609,010	6.50	1.1	1,153,050	5.00	4,762,060	29,204,315
1901	3,709,560	1.4	3,711,680	8.25	1.2	1,268,700	6.30	4,980,380	38,614,170
1902	3,440,277	1.8	4,439,940	6.80	1.3	1,202,860	5.50	5,642,800	36,807,322
1903	3,661,895	1.9	5,216,404	5.75	1.3	1,191,345	4.95	6,407,749	35,891,480
1904	3,707,215	1.5	4,499,090	5.62	1.2	1,091,590	4.50	5,590,680	30,197,040
1905	4,692,925	1.8	6,477,300	5.50	1.2	1,313,310	4.50	7,790,610	41,535,045
1906	4,418,600	1.3	4,892,950	7.50	1.2	1,110,690	5.50	6,003,640	42,805,920
1907	4,268,730	1.5	5,117,878	8.50	1.3	1,172,590	6.75	6,290,468	51,316,945
1908	4,121,432	1.8	5,838,640	6.16	1.6	1,445,980	5.09	7,284,620	43,326,060
1909	4,352,295	1.7	5,828,580	7.42	1.4	1,219,630	5.90	7,048,210	50,443,880

*No authentic data obtainable.
†Not including alfalfa.

HAY

Statistics of township assessors; values by Iowa Weather and Crop Service

Year	†Acreage all hay	†TAME HAY			WILD HAY			†Total yield all hay, tons	†Total value all hay
		Average yield per acre, tons	Total yield, tons	Average farm value per ton, December 1st.	Average yield per acre, tons	Total yield, tons	Average farm value per ton, December 1st.		
1910	4,267,725	1.1	3,876,844	9.75	1.1	807,280	9.75	4,684,124	45,670,209
1911	3,940,384	0.8	2,544,088	13.44	0.8	662,866	10.28	3,206,954	41,006,804
1912	3,390,118	1.2	3,138,940	9.89	1.1	836,735	7.43	3,975,675	37,261,058
1913	3,682,178	1.2	3,568,590	9.93	1.1	794,142	8.80	3,754,102	42,424,549
1914	3,938,961	1.2	3,932,650	10.78	1.1	767,089	8.26	4,699,739	48,730,122
1915	3,831,387	1.4	4,673,655	8.94	1.1	588,918	7.41	5,262,573	46,146,358
1916	3,702,855	1.4	4,324,165	9.00	1.2	645,709	7.89	4,969,874	44,012,129
1917	3,286,061	1.2	3,209,412	18.82	1.1	598,177	14.79	3,807,589	69,248,172
1918	3,182,728	1.1	3,010,684	19.57	1.1	511,711	16.00	3,422,395	67,106,461
1919	3,228,356	1.7	4,534,032	18.37	1.3	663,152	16.48	5,197,184	94,218,911
1920	3,356,292	1.4	4,138,001	16.24	1.3	611,280	12.69	4,749,281	74,958,279
1921	3,428,272	1.39	4,140,590	9.08	1.16	515,963	7.47	4,656,553	41,450,801
1922	3,584,443	1.49	4,700,973	10.40	1.14	486,750	8.50	5,187,723	53,027,494
Average for 27 years	3,761,625	1.44	4,217,345	$ 9.30	1.21	1,038,046	$ 7.59	5,229,146	$ 44,525,910

†Not including alfalfa.

ALFALFA

Statistics secured by the Census

Year	Acres	Average yield per acre, tons	Total yield, tons	Average farm value per ton December 1st	Total value
1900	2,298	2.72	6,252	...	...
1905	10,351	2.49	25,724	$ 4.17	$ 107,144
Statistics of township assessors; values by Iowa Weather and Crop Service					
1909	23,041	2.86	65,806	...	...
1910	24,132	2.72	65,629	*8.49	557,190
1911	30,323	2.33	70,640	...	...
1912	46,644	2.27	105,936	...	...
1913	79,769	2.37	188,941	...	...
1914	132,298	2.08	275,437	12.50	3,442,962
1915	152,873	2.41	367,913	11.18	4,113,267
1916	142,753	2.78	396,323	11.71	4,640,942
1917	115,170	2.22	255,487	23.40	5,978,396
1918	120,099	2.03	244,374	23.93	5,847,870
1919	157,679	3.22	507,247	23.09	11,712,333
1920	180,381	3.01	543,827	19.23	10,457,793
1921	187,345	2.93	549,726	12.92	7,102,460
1922	191,551	2.61	500,083	14.80	7,401,228
Average for 16 years	99,794	2.56	260,584	15.04	5,578,326

*Government Census.

STATISTICS OF CROPS, 1922

COMPILED IN THE U. S. BUREAU OF AGRICULTURAL ECONOMICS

CORN.

TABLE 1.—*Corn: Acreage, production, and total farm value, by States, 1920–1922.*

State	Thousands of acres			Production (thousands of bushels)			Total value, basis Dec. 1 price (thousands of dollars)		
	1920	1921	1922[1]	1920	1921	1922[1]	1920	1921	1922[1]
Maine	29	30	32	1,305	1,500	1,312	1,670	1,155	1,312
New Hampshire	24	24	24	1,080	1,272	1,032	1,566	954	774
Vermont	81	81	82	3,807	4,455	3,444	4,797	3,386	3,134
Massachusetts	64	65	65	2,560	3,120	2,600	3,200	2,402	2,444
Rhode Island	14	14	14	560	644	560	1,008	708	672
Connecticut	74	74	77	2,960	3,848	3,465	4,144	3,463	3,326
New York	767	798	798	30,680	36,708	28,329	35,589	24,594	23,513
New Jersey	236	241	236	10,384	11,327	9,912	8,826	6,003	6,938
Pennsylvania	1,556	1,589	1,573	70,020	76,272	69,212	70,020	41,950	49,833
Delaware	173	185	185	6,488	6,845	5,439	4,866	3,080	3,807
Maryland	650	645	635	25,025	25,155	25,400	20,270	12,326	17,272
Virginia	1,884	1,904	1,904	56,520	47,600	53,312	56,520	32,844	42,116
West Virginia	600	592	604	20,400	20,128	20,536	23,664	15,096	17,250
North Carolina	2,428	2,552	2,526	54,630	49,254	50,520	61,732	38,418	44,963
South Carolina	1,830	2,022	2,062	34,770	32,352	29,899	40,333	23,940	26,012
Georgia	4,393	4,665	4,385	65,895	69,975	52,620	69,190	37,087	45,253
Florida	750	788	750	10,125	11,032	10,500	10,125	5,847	7,350
Ohio	3,965	3,785	3,823	172,081	155,185	149,097	117,015	63,626	98,404
Indiana	4,834	4,718	4,765	195,777	169,848	176,305	115,508	62,844	98,731
Illinois	9,079	8,999	8,819	314,133	305,966	313,074	185,338	116,267	187,844
Michigan	1,706	1,703	1,720	66,534	66,417	60,716	54,558	31,880	40,680
Wisconsin	2,067	2,110	2,209	89,294	97,482	98,300	68,756	44,842	61,929
Minnesota	3,288	3,820	3,979	123,300	156,620	131,307	62,883	48,552	73,532
Iowa	10,300	10,250	10,123	473,800	430,500	455,535	222,686	129,150	255,100
Missouri	6,646	6,096	6,150	212,672	182,880	175,275	136,110	73,152	119,187
North Dakota	569	620	680	13,656	17,360	18,700	9,832	5,902	9,350
South Dakota	3,650	3,926	3,861	109,500	125,632	110,038	45,990	32,664	55,019
Nebraska	7,560	7,419	7,296	255,528	207,732	182,400	104,766	56,088	105,792
Kansas	5,007	4,358	5,098	132,686	96,748	98,391	58,382	29,992	60,019
Kentucky	3,334	3,209	3,145	101,687	82,150	88,060	83,383	45,182	60,761
Tennessee	3,511	3,516	3,280	98,308	90,713	75,440	85,528	47,171	59,598
Alabama	3,593	4,042	3,638	56,410	58,609	50,932	55,282	36,338	45,839
Mississippi	2,770	3,172	2,918	44,320	57,096	51,065	45,206	31,974	43,405
Louisiana	1,569	1,796	1,706	30,125	35,022	29,002	25,606	22,764	24,072
Texas	5,487	6,227	5,729	142,662	156,920	114,580	119,836	84,737	95,101
Oklahoma	2,820	3,077	3,200	78,960	76,925	57,600	42,638	24,616	40,320
Arkansas	2,330	2,640	2,350	54,522	58,080	45,825	52,886	33,106	38,951
Montana	184	190	219	2,226	3,800	5,475	1,781	2,546	2,902
Wyoming	50	56	65	1,200	1,232	1,560	672	616	936
Colorado	1,182	1,102	1,145	24,231	15,979	18,320	16,962	4,953	12,091
New Mexico	276	290	182	5,989	6,380	2,475	6,588	5,742	2,030
Arizona	29	35	39	638	1,015	1,170	1,085	1,015	1,346
Utah	24	21	32	526	517	781	789	393	664
Nevada	1	1	1	32	29	21	51	35	22
Idaho	45	47	52	1,620	1,645	1,976	1,620	822	1,561
Washington	62	64	67	2,232	2,560	2,747	2,790	2,202	2,884
Oregon	69	66	69	2,139	1,980	2,277	2,781	1,663	2,072
California	139	116	116	4,587	4,060	4,176	5,504	3,126	4,176
United States	101,699	103,740	102,428	3,208,584	3,068,569	2,890,712	2,150,332	1,297,213	1,900,287

[1] Preliminary estimate.

CORN—Continued.

TABLE 2.—*Corn: Area and production in undermentioned countries.*

Country	Area				Production			
	Average, 1909–1913	1920	1921	1922[1]	Average, 1909–1913	1920	1921	1922[1]
NORTHERN HEMISPHERE								
NORTH AMERICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Canada[2]	309	292	297	299	17,297	14,335	14,904	14,909
United States[2]	104,229	101,699	103,850	103,234	2,712,364	3,208,584	3,080,372	2,896,108
Mexico	11,554	....	....	....	164,657	....	[3] 71,005	[3] 61,060
Guatemala	....	553	310	468	....	4,062	4,344	....
Total North American countries marked [2]	104,538	101,991	104,147	....	2,729,661	3,222,919	3,095,276	....
EUROPE								
France [2]	[4] 1,155	829	814	750	[4] 22,229	15,267	10,393	....
Spain [2]	1,134	1,168	1,178	....	26,548	27,692	24,897	....
Portugal	....	734	....	....	15,000	11,721	....	....
Italy [2]	3,931	3,710	3,717	3,707	100,349	89,298	92,325	70,863
Switzerland [2]	3	6	5	4	113	280	217	185
Austria [2]	[4] 761	102	112	....	[4] 14,536	2,122	2,456	....
Czechoslovakia [2]	......	376	385	395	....	9,648	9,432	8,996
Hungary [2]	[4] 6,038	2,017	2,167	1,716	[4] 168,081	50,156	30,800	31,494
Yugoslavia [2]	....	4,486	4,646	4,787	....	101,136	73,788	57,400
Serbia, Croatia-Slavonia, and Bosnia-Herzegovina [2]	[4] 3,059	....	....	....	[4] 62,112	....	....	....
Greece [2]	[5] 273	519	494	....	[5] 5,952	9,133	7,874	....
Bulgaria [2]	[4] 1,544	1,407	1,418	1,552	[4] 28,219	20,851	24,172	19,802
Rumania [2]	[4] 5,143	7,595	8,510	8,411	[4] 100,620	174,553	103,228	93,810
Poland	....	108	132	....	....	1,082	2,266	....
Russia, including Ukraine and Northern Caucasia	[4] 3,923	....	....	....	[4] 70,222	....	....	....
Total European countries marked [2]	23,041	22,215	23,446	......	528,759	500,136	379,582	282,550
AFRICA								
Morocco, Western	....	309	375	....	....	3,436	3,726	....
Algeria [2]	34	22	24	19	461	254	354	276
Tunis [2]	43	25	50	....	228	110	315	....
Egypt [2]	1,857	1,938	2,086	....	64,220	71,939	67,165	....
Total African countries marked [2]	1,934	1,985	2,160	....	64,909	72,303	67,834	....
ASIA								
British India [2]	6,340	6,620	6,164	....	87,240	98,840	78,840	....
Japanese Empire:								
Japan	130	150	....	....	3,637	3,947	....	....
Chosen	156	....	....	....	2,236	....	....	....
Philippines [2]	992	1,327	1,344	....	7,446	15,690	16,734	14,645
Total Asiatic countries marked [2]	7,332	7,947	7,508	....	94,686	114,530	95,574	....
Total Northern Hemisphere countries marked [2]	136,845	134,138	137,261	....	3,418,015	3,909,888	3,638,266	....

[1] Figures for 1922 and 1921-22 compiled from reports received up to Nov. 1, 1922.

[2] Indicates countries reporting for all periods except 1922 either as listed or as part of some other country.

[3] Commercial source, quoting official statistics.

[4] Old boundaries.

[5] 1 year only.

CORN—Continued.

TABLE 2.—*Corn: Area and production in undermentioned countries*—Continued

Country	Area				Production			
	Average, 1908–9 to 1912–13	1919–20	1920–21	1921–22 [1]	Average, 1908–9 to 1912–13	1919–20	1920–21	1921–22 [1]
SOUTHERN HEMISPHERE	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Chile [2]	56	62	63	60	1,390	1,446	1,685	2,030
Uruguay [2]	551	495	494	....	6,027	2,784	4,722	....
Argentina [2]	8,128	8,184	8,090	7,344	174,502	258,686	230,423	156,056
Union of South Africa [2]	[3] 2,171	4,003	3,493	....	[3] 32,588	44,808	[4] 47,669	[4] 34,136
Southern Rhodesia	....	173	186	190	[5] 1,404	4,002	4,360	2,455
Java and Madura	....	4,784	4,884	3,693	....	61,251	....	....
Australia [2]	352	265	284	....	10,264	6,764	7,259	....
New Zealand [2]	10	9	12	10	493	406	501	483
Total Southern Hemisphere countries marked [2]	11,268	13,018	12,436	....	225,264	314,894	292,259	....
World total, all countries marked [2]	148,113	147,156	149,697	....	3,643,279	4,224,782	3,930,525	....
Total, all countries reporting	163,876	153,967	155,584	....	3,900,435	4,314,283	4,016,226	....

[1] Figures for 1922 and 1921-22 compiled from reports received up to Nov. 1, 1922.
[2] Indicates countries reporting for all periods except 1922 either as listed or as part of some other country.
[3] 3-year average.
[4] Commercial source, quoting official statistics.
[5] 1 year only.

TABLE 3.—*Corn: World production so far as reported, 1895–1921.*

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		*Bushels*		*Bushels*		*Bushels*
1895	2,834,750,000	1902	3,187,311,000	1909	3,563,226,000	1916	3,309,818,000
1896	2,964,435,000	1903	3,066,506,000	1910	4,031,630,000	1917	3,540,863,000
1897	2,587,206,000	1904	3,109,252,000	1911	3,481,007,000	1918	3,129,473,000
1898	2,682,619,000	1905	3,461,181,000	1912	4,371,888,000	1919	3,649,815,000
1899	2,724,100,000	1906	3,963,645,000	1913	3,587,429,000	1920	4,314,283,000
1900	2,792,561,000	1907	3,420,321,000	1914	3,777,913,000	1921	4,016,226,000
1901	2,366,883,000	1908	3,606,931,000	1915	4,231,780,000		

TABLE 4.—*Corn: Average yield per acre in undermentioned countries, 1890–1922.*

Year	United States	Russia (European) [1]	Italy	Austria	Hungary (proper)	France	Argentina
Average:	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*
1890–1899	24.5	13.6	15.3	19.5	23.0	19.1	....
1900–1909	25.8	13.9	21.4	18.9	22.2	18.9	26.6
1910–1919	26.2	[2] 16.7	24.7	21.0	[3] 28.0	17.8	19.2
1919	28.9	....	23.1	20.3	....	15.9	24.5
1920	31.5	....	24.1	20.8	24.9	18.4	31.6
1921	29.7	....	24.8	21.9	14.2	12.8	28.5
1922	28.1	....	19.1	....	18.4	....	21.2

[1] Excludes Poland. [2] 7-year average. [3] 6-year average.

CORN—Continued.

TABLE 5.—*Corn: Acreage, production, value, exports, etc., in the United States, 1849–1922.*

NOTE.—Figures in *italics* are census returns; figures in roman are estimates of the Department of Agriculture. Estimates of acres are obtained by applying estimated percentage of increase or decrease to the published acreage of the preceding year, except that a revised base is used for applying percentage estimates whenever new census data are available. Acreages have been revised for years 1890-1908, so as to be consistent with the following as well as the preceding census acreage, and total production and farm values are adjusted accordingly.

Year	Acreage	Average yield per acre	Production	Average farm price per bushel Dec. 1	Farm value Dec. 1,	Chicago cash price per bushel, contract [1]				Domestic exports, including corn meal, fiscal year beginning July 1	Imports during fiscal year beginning July 1	Per cent of crop exported
						December		Following May				
						Low	Hgh	Low	Hgh			
	1,000 acres	*Bush.*	*1,000 bushels*	*Cts.*	*1,000 dollars*	*Cts.*	*Cts.*	*Cts*	*Cts.*	*Bushels*	*Bushels*	*P. ct.*
1849........	....	......	*592,071*	......	....	....	....	....	....	7,632,860	....	1.3
1859........	....	......	*838,793*	......	....	....	....	....	....	4,248,991	49,190	.5
1866–1875...	37,216	26.1	969,948	46.9	454,535	46	55	50	59	24,242,396	66,076	2.5
1876–1885...	61,671	25.4	1,564,992	39.5	617,780	42	48	44	49	69,091,110	33,334	4.4
1886–1895...	74,274	23.8	1,769,616	36.7	648,785	38	43	40	51	59,293,085	11,445	3.4
1896........	86,560	28.9	2,503,484	21.3	532,884	22½	23¾	23	25½	178,817,417	6,284	7.1
1897........	88,127	24.3	2,144,553	26.0	558,309	25	27½	32⅜	37	212,055,543	3,417	9.9
1898........	88,304	25.6	2,261,119	28.4	642,747	33⅛	38	32½	34⅜	177,255,046	4,171	7.8
1899........	*94,914*	25.9	2,454,628	29.9	734,916	30	31½	36	40½	213,123,412	2,480	8.7
1900........	95,042	26.4	2,505,148	35.1	878,243	35¼	40½	42⅝	58½	181,405,473	5,169	7.2
1901........	94,636	17.0	1,613,528	60.1	969,285	62½	67½	59⅛	64¾	28,028,688	18,278	1.7
1902........	95,517	27.4	2,619,499	40.1	1,049,791	43¾	57¼	44	46	76,639,261	40,919	2.9
1903........	90,661	25.9	2,346,897	42.1	987,882	41	43¾	47¼	50	58,222,061	16,633	2.5
1904........	93,340	27.1	2,528,662	43.7	1,105,690	43½	49	48	64½	90,293,483	15,443	3.6
1905........	93,573	29.4	2,748,949	40.8	1,120,513	42	50¼	47½	50	119,893,833	10,127	4.4
1906........	93,643	30.9	2,897,662	39.3	1,138,053	40	46	49½	56	86,368,228	10,818	3.0
1907........	94,971	26.5	2,512,065	50.9	1,277,607	57½	61½	67¾	82	55,063,860	20,312	2.2
1908........	95,603	26.6	2,544,957	60.0	1,527,679	56¾	62¼	72¼	76	37,665,040	258,065	1.5
1909........	*98,383*	26.1	2,572,336	58.6	1,507,185	62½	66	56	63	38,128,498	....	1.5
1910 [2]	104,035	27.7	2,886,260	48.0	1,384,817	45½	50	52¼	55¼	65,614,522	....	2.3
1911........	105,825	23.9	2,531,488	61.8	1,565,258	68	70	76¼	82½	41,797,291	53,425	1.7
1912........	107,083	29.2	3,124,746	48.7	1,520,454	47½	54	55¼	60	50,780,143	903,062	1.6
1913........	105,820	23.1	2,446,988	69.1	1,692,092	64	73½	67	72½	10,725,819	12,367,369	.4
1914........	103,435	25.8	2,672,804	64.4	1,722,070	62¼	68¼	50½	56	50,668,303	9,897,939	1.9
1915........	106,197	28.2	2,994,793	57.5	1,722,680	69½	75	69	78½	39,896,928	5,208,497	1.3
1916........	105,296	24.4	2,566,927	88.9	2,280,729	88	96	152	174	66,753,294	2,267,299	2.6
1917........	116,730	26.3	3,065,233	127.9	3,920,228	160	190	150	170	49,073,263	3,196,420	1.6
1918........	104,467	24.0	2,502,665	136.5	3,416,240	135	155	160½	185	23,018,822	3,311,211	.9
1919........	97,170	28.9	2,811,302	134.5	3,780,597	142	160	189	217	16,728,746	10,229,249	.6
1920 [2]	101,699	31.5	3,208,584	67.0	2,150,332	70¼	86	59	66	70,905,781	5,743,384	2.2
1921........	103,740	29.6	3,068,569	42.3	1,297,213	46¾	51½	59½	65	179,514,442	124,591	5.9
1922 [3]	102,428	28.2	2,890,712	65.7	1,900,287	65⅞	68¼	....	....	....	....	......

[1] No. 2 to 1908.

[2] Acreage adjusted to census basis.

[3] Preliminary estimate.

CORN—Continued.

TABLE 6.—*Corn: Yield per acre, price per bushel December 1, and value per acre, by States.*

State	Yield per acre (bushels)						Farm price per bushel (cents)											Value per acre (dollars) [1]	
	5-year average, 1918–1922	1918	1919	1920	1921	1922	10-year average, 1913–1922	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	5-year average 1917–1921	1922
Maine	47.2	45.0	55.0	45.0	50.0	41.0	127	87	88	85	119	228	167	195	128	77	100	72.57	41.00
N. Hampshire	46.5	45.0	46.5	45.0	53.0	43.0	119	81	82	76	115	217	150	170	145	75	75	67.67	32.25
Vermont	45.7	38.0	46.5	47.0	55.0	42.0	121	81	81	84	110	213	170	175	126	76	91	68.57	38.22
Massachusetts	46.5	52.0	52.3	40.0	48.0	40.0	122	85	85	80	120	215	170	172	125	77	94	72.41	37.60
Rhode Island	43.0	44.0	45.0	40.0	46.0	40.0	145	99	98	100	138	236	180	186	180	110	120	76.92	48.00
Connecticut	47.4	50.0	50.0	40.0	52.0	45.0	127	85	89	85	120	215	171	180	140	90	96	77.16	43.20
New York	40.1	36.0	43.0	40.0	46.0	35.5	116	81	83	78	110	198	175	166	116	67	83	54.60	29.46
New Jersey	42.8	41.0	40.0	44.0	47.0	42.0	101	75	76	75	100	170	150	153	85	53	70	51.28	29.40
Pennsylvania	44.8	40.0	47.0	45.0	48.0	44.0	99	72	73	70	97	153	155	147	100	55	72	52.43	31.68
Delaware	33.0	31.0	30.0	37.5	37.0	29.4	88	59	62	62	89	140	136	145	75	45	70	35.61	20.58
Maryland	38.7	35.0	41.0	38.5	39.0	40.0	90	65	68	61	89	140	135	140	81	49	68	41.91	27.20
Virginia	27.8	28.0	28.0	30.0	25.0	28.0	105	76	81	71	93	153	160	169	100	69	79	36.14	22.12
West Virginia	33.4	31.0	34.0	34.0	34.0	34.0	113	80	83	74	101	170	180	164	116	75	84	45.50	28.56
North Carolina	20.4	21.0	19.0	22.5	19.3	20.0	117	88	86	77	110	170	177	185	113	78	89	29.36	17.80
South Carolina	16.5	17.0	16.0	19.0	16.0	14.5	125	97	92	87	113	192	195	197	116	74	87	27.01	12.62
Georgia	14.3	15.0	14.5	15.0	15.0	12.0	108	91	85	78	100	160	165	160	105	53	86	19.45	10.32
Florida	14.5	16.0	15.0	13.5	14.0	14.0	97	82	80	73	90	140	138	140	100	53	70	17.00	9.80
Ohio	40.5	36.0	43.0	43.4	41.0	39.0	83	63	61	56	90	136	130	121	68	41	66	39.37	25.74
Indiana	36.7	33.0	37.0	40.5	36.0	37.0	77	60	58	51	84	125	119	125	59	37	56	33.55	20.72
Illinois	35.1	35.5	36.0	34.6	34.0	35.5	78	63	61	54	84	110	120	130	59	38	60	32.91	21.30
Michigan	36.1	30.0	37.0	39.0	39.0	35.3	94	67	67	68	95	182	130	138	82	48	67	35.98	23.65
Wisconsin	43.8	40.2	45.0	43.2	46.2	44.5	89	60	65	68	92	163	130	125	77	46	63	39.78	28.04
Minnesota	38.3	40.0	40.0	37.5	41.0	33.0	73	53	52	62	80	110	111	120	51	31	56	31.45	18.48
Iowa	42.1	36.0	41.6	46.0	42.0	45.0	73	60	55	51	80	108	122	120	47	30	56	33.60	25.20
Missouri	27.5	20.0	27.0	32.0	30.0	28.5	86	74	68	57	90	114	143	138	64	40	68	27.65	19.38
North Dakota	26.3	19.0	33.0	24.0	28.0	27.5	84	52	58	67	84	151	130	140	72	34	50	22.26	13.75
South Dakota	30.6	34.0	28.5	30.0	32.0	28.5	70	56	50	49	77	120	110	119	42	26	50	25.17	14.25
Nebraska	26.1	17.7	26.2	33.8	28.0	25.0	74	65	53	47	78	120	128	122	41	27	58	21.69	14.50
Kansas	18.1	7.1	15.2	26.5	22.2	19.3	83	78	63	51	90	125	149	140	44	31	61	13.33	11.77
Kentucky	26.8	26.0	24.0	30.5	25.6	28.0	91	76	64	56	87	121	146	155	82	55	69	30.47	19.32
Tennessee	24.4	24.0	21.4	28.0	25.8	23.0	94	77	68	58	94	120	145	157	87	52	79	28.20	18.17
Alabama	14.7	14.6	14.5	15.7	14.5	14.0	102	89	80	69	102	125	148	159	98	62	90	17.81	12.60
Mississippi	16.7	17.0	15.0	16.0	18.0	17.5	100	77	73	65	98	138	151	160	102	56	85	20.87	14.88
Louisiana	17.8	16.0	17.5	19.2	19.5	17.0	100	77	75	64	94	146	161	150	85	65	83	21.46	14.11
Texas	22.2	10.0	30.0	26.0	25.2	20.0	100	82	74	58	104	167	176	118	84	54	83	21.36	16.60
Oklahoma	20.5	7.5	24.0	28.0	25.0	18.0	87	72	64	46	93	147	164	127	54	32	70	15.68	12.60
Arkansas	19.2	13.0	18.0	23.4	22.0	19.5	104	78	80	64	98	140	180	164	97	57	85	24.35	16.58
Montana	16.4	21.0	4.0	12.1	20.0	25.0	99	77	76	69	93	175	135	165	80	67	53	15.98	13.25
Wyoming	22.2	25.0	16.0	24.0	22.0	24.0	95	80	70	67	90	175	140	165	56	50	60	24.17	14.40
Colorado	16.7	17.5	15.0	20.5	14.5	16.0	85	73	60	55	90	125	135	142	70	31	66	17.75	10.56
New Mexico	20.8	25.0	21.6	21.7	22.0	13.6	114	75	80	73	113	188	180	151	110	90	82	31.78	11.15
Arizona	27.6	28.0	29.0	22.0	29.0	30.0	147	110	120	115	140	190	210	200	170	100	115	46.90	34.50
Utah	23.6	28.0	19.2	21.9	24.6	24.4	115	70	75	80	115	170	181	150	150	76	85	34.71	20.74
Nevada	28.2	32.0	26.9	32.0	29.1	21.1	133	118	110	93	125	150	210	140	160	120	105	47.20	22.16
Idaho	36.2	40.0	32.0	36.0	35.0	38.0	104	68	72	65	100	155	183	165	100	50	79	45.51	30.02
Washington	38.2	38.0	36.0	36.0	40.0	41.0	116	80	73	77	100	162	170	185	125	86	105	54.11	43.05
Oregon	30.3	31.0	26.5	31.0	30.0	33.0	109	70	82	82	95	150	155	155	130	84	91	39.93	30.03
California	34.2	35.0	32.0	33.0	35.0	36.0	124	88	87	88	124	185	193	179	120	77	100	50.12	36.00
United States	28.4	24.0	28.9	31.5	29.6	28.2	85.4	69.1	64.4	57.5	88.9	127.9	136.5	134.5	67.0	42.3	65.7	27.77	18.55

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[1] Based upon farm price December 1.

CORN—Continued.

TABLE 7.—*Corn: Production and distribution in the United States, 1897–1922.*

Year	Old stock on farms Nov. 1	Corn				Total supplies	Stock on farms Mar. 1 following	Shipped out of county where grown
		Quantity	Quality	Proportion merchantable				
	1,000 bushels	*1,000 bushels*	*Per cent*	*Per cent*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
1897–1901 ...	166,809	2,195,795	83.3	85.6	2,005,697	2,362,604	823,739	424,894
1902–1906 ...	91,662	2,628,334	88.1	82.2	2,170,417	2,719,996	1,045,965	596,400
1907	129,786	2,512,065	82.8	77.2	1,939,877	2,641,851	931,503	470,046
1908	69,251	2,544,957	86.9	88.2	2,244,571	2,614,208	999,235	565,510
1909	77,403	2,572,336	84.2	82.7	2,126,965	2,649,739	980,848	620,057
1910	113,919	2,886,260	87.2	86.4	2,492,763	3,000,179	1,165,378	661,777
1911	123,824	2,531,488	80.6	80.1	2,027,922	2,655,312	884,059	517,766
1912	64,764	3,124,746	85.5	85.0	2,654,907	3,189,510	1,290,642	680,831
1913	137,972	2,446,988	82.2	80.1	1,961,058	2,584,960	866,352	422,059
1914	80,046	2,672,804	85.1	84.5	2,259,755	2,752,850	910,894	498,285
1915	96,009	2,994,793	77.2	71.1	2,127,965	3,090,802	1,116,559	560,824
1916	87,908	2,566,927	83.8	83.9	2,154,487	2,654,835	782,303	450,589
1917	34,448	3,065,233	75.2	60.0	1,837,728	3,099,681	1,253,290	678,027
1918	114,678	2,502,665	85.6	82.4	2,062,041	2,617,343	855,269	362,589
1919	69,835	2,811,302	89.1	87.1	2,448,204	2,881,137	1,045,575	470,328
1920	139,083	3,208,584	89.6	86.9	2,789,720	3,347,667	1,564,832	705,481
1921	285,769	3,068,569	84.0	87.5	2,684,634	3,353,338	1,305,559	587,893
1922 [1].........	177,287	2,890,712	85.0	88.3	2,553,290	3,067,999	1,087,412	515,236

[1] Preliminary estimate.

TABLE 8.—*Corn: Monthly and yearly average price per bushel of reported sales, No. 3 yellow, 1899–1900 to 1921–22.*

Crop year	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Weighted average
1899–1900........	$0.31	$0.30	$0.30	$0.32	$0.36	$0.39	$0.38	$0.40	$0.41	$0.40	$0.40	$0.42	$0.36
1900–1901........	.37	.35	.36	.37	.39	.42	.43	.42	.48	.56	.56	.56	.43
1901–2...........	.60	.64	.62	.59	.59	.62	.62	.63	.65	.60	.59	.60	.62
1902–3...........	.53	.46	.43	.43	.41	.41	.46	.49	.51	.53	.51	.45	.47
1903–4...........	.44	.44	.43	.46	.46	.49	.49	.50	.49	.52	.53	.55	.49
1904–5...........	.48	.43	.42	.44	.47	.48	.50	.55	.57	.54	.53	.53	.48
1905–6...........	.45	.42	.42	.42	.40	.42	.47	.49	.52	.54	.47	.46	.44
1906–7...........	.43	.42	.41	.43	.43	.44	.52	.53	.54	.57	.64	.65	.50
1907–8...........	.59	.58	.53	.54	.63	.65	.73	.72	.76	.81	.80	.77	.68
1908–9...........	.63	.59	.64	.65	.66	.69	.73	.75	.72	.70	.69	.59	.65
Av., 1899-1908..	.48	.46	.46	.47	.48	.50	.53	.55	.57	.58	.57	.60	.51
1909–10..........	.59	.59	.64	.63	.61	.57	.60	.59	.62	.64	.58	.50	.59
1910–11..........	.49	.45	.45	.45	.45	.50	.54	.55	.63	.65	.67	.73	.53
1911–12..........	.68	.61	.62	.64	.68	.78	.79	.75	.68	.79	.74	.65	.71
1912–13..........	.52	.46	.46	.48	.49	.55	.57	.60	.62	.74	.75	.70	.53
1913–14..........	.72	.66	.62	.62	.64	.67	.70	.72	.71	.82	.79	.73	.70
Av., 1909-1913..	.60	.55	.56	.56	.57	.61	.64	.64	.65	.73	.71	.66	.61
1914–15..........	.67	.64	.71	.74	.72	.75	.77	.74	.78	.81	.74	.65	.70
1915–16..........	.63	.69	.74	.74	.73	.76	.75	.74	.81	.85	.86	.96	.79
1916–17..........	.98	.92	.98	1.00	1.09	1.40	1.59	1.70	1.99	2.06	2.10	2.03	1.11
1917–18..........	2.21	1.77	1.77	1.81	1.70	1.65	1.60	1.62	1.70	1.72	1.58	1.41	1.63
1918–19..........	1.33	1.45	1.43	1.27	1.53	1.62	1.74	1.78	1.92	1.95	1.55	1.41	1.62
1919–20..........	1.46	1.47	1.51	1.46	1.58	1.69	2.02	1.89	1.58	1.58	1.31	.91	1.59
1920–21..........	.77	.74	.65	.63	.62	.57	.60	.63	.60	.56	.53	.45	.62
Av., 1914-1920..	1.15	1.10	1.11	1.09	1.14	1.21	1.30	1.30	1.34	1.35	1.24	1.12	1.15
1921–22..........	.47	.47	.48	.55	.57	.58	.62	.61	.64	.62	.64	.69	.55

[1] Compiled from Chicago Daily Trade Bulletin.

CORN—Continued.

TABLE 9.—*Corn: Farm price, cents per bushel, on 1st of each month, 1908–1922.*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average [1]
1908	54.0	56.0	58.1	61.2	64.7	73.7	75.7	78.1	76.5	72.3	63.5	60.6	63.4
1909	60.7	61.4	64.7	67.5	71.9	76.3	77.0	75.2	71.0	67.1	62.2	57.9	65.9
1910	62.3	65.2	65.9	65.5	63.5	65.2	66.2	67.2	66.3	61.1	52.6	48.0	62.1
1911	48.2	49.0	48.9	49.7	51.8	55.1	60.0	65.8	65.9	65.7	64.7	61.8	55.3
1912	62.2	64.6	66.6	71.1	79.4	82.5	81.1	79.3	77.6	70.2	58.4	48.7	67.6
1913	48.9	50.6	52.2	53.7	56.8	60.6	63.2	65.4	75.4	75.3	70.7	69.1	59.4
1914	69.6	68.3	69.1	70.7	72.1	75.0	75.5	76.8	81.5	78.2	70.6	64.4	71.4
1915	66.2	72.8	75.1	75.1	77.7	77.9	77.7	78.9	77.3	70.5	61.9	57.5	71.2
1916	62.1	66.7	68.2	70.3	72.3	74.1	75.4	79.4	83.6	82.3	85.0	88.9	73.8
1917	90.0	95.8	100.9	113.4	150.6	160.1	164.6	196.6	175.5	175.1	146.0	127.9	129.2
1918	134.8	138.8	154.3	153.6	155.7	152.5	153.7	159.7	165.7	159.5	140.3	136.5	147.3
1919	144.7	138.1	137.2	149.6	162.6	171.2	176.5	191.2	185.4	153.9	133.4	134.5	151.5
1920	140.4	146.8	148.5	158.6	169.6	185.2	185.6	163.7	155.7	121.3	87.3	67.0	140.4
1921	66.7	62.4	64.5	63.0	59.5	62.5	62.2	61.7	56.2	51.0	41.1	42.3	58.6
1922	43.4	45.8	54.8	56.9	59.7	61.6	62.2	64.4	62.7	61.6	62.9	65.7	56.1
Average, 1913–1922	86.7	88.6	92.5	96.5	103.7	108.1	109.7	113.8	111.9	102.9	90.9	90.2	102.6

[1] Weighted average.

TABLE 10.—*Corn: Monthly marketings by farmers, 1917–1922.*

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season
	Estimated amount sold monthly by farmers of United States (millions of bushels).												
1917–18	34	26	22	24	56	78	91	103	88	45	36	37	640
1918–19	27	28	35	27	30	49	61	30	31	34	33	25	410
1919–20	20	25	21	25	40	66	57	42	38	26	33	47	440
1920–21	35	36	45	35	46	74	93	76	58	36	55	61	650
1921–22	28	42	49	39	38	71	80	72	43	27	44	43	576
Average	29	31	34	30	42	68	76	65	52	34	40	43	544
	Per cent of year's sales.												
1917–18	5.3	4.0	3.4	3.8	8.8	12.2	14.2	16.1	13.7	7.1	5.6	5.8	100.0
1918–19	6.7	6.8	8.4	6.7	7.3	12.1	15.0	7.2	7.5	8.2	8.0	6.1	100.0
1919–20	4.5	5.6	4.9	5.6	9.2	15.0	12.9	9.5	8.7	5.9	7.6	10.6	100.0
1920–21	5.4	5.6	6.9	5.3	7.1	11.3	14.3	11.7	8.9	5.6	8.5	9.4	100.0
1921–22	4.9	7.3	8.6	6.7	6.6	12.4	13.8	12.4	7.5	4.7	7.6	7.5	100.0
Average	5.4	5.9	6.4	5.6	7.8	12.6	14.0	11.4	9.2	6.3	7.5	7.9	100.0

CORN—Continued.

TABLE 11.—*Corn: Monthly and yearly receipts and shipments, 11 primary markets, 1909–10 to 1921–22.*[1]

Year	Chicago	Milwaukee	Minneapolis	Duluth	St. Louis	Toledo	Detroit	Kansas City	Peoria	Omaha	Indianapolis	Total
	1,000 bush.	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*
1909–10:												
Receipts	88,428	6,535	6,564	883	22,913	4,001	2,477	15,102	15,387	(2)	(2)	162,280
Shipments	66,011	5,893	5,047	943	16,383	1,840	1,412	12,873	11,009	(2)	(2)	121,411
1910–11:												
Receipts	113,808	7,895	8,948	1,697	23,766	6,236	3,860	16,026	16,477	(2)	(2)	198,713
Shipments	92,652	7,625	5,370	1,697	15,422	3,290	1,930	13,395	11,141	(2)	(2)	152,522
1911–12:												
Receipts	108,431	9,410	5,423	12	25,176	4,121	2,857	19,646	19,041	20,817	13,687	228,621
Shipments	73,940	6,506	3,264	12	15,492	2,037	1,888	14,971	14,292	15,404	1,947	149,753
1912–13:												
Receipts	131,792	11,613	6,258	492	22,762	2,996	2,757	16,992	17,923	22,618	15,974	252,177
Shipments	94,311	7,887	4,374	492	12,257	1,885	1,615	10,614	11,202	17,732	3,637	166,006
1913–14:												
Receipts	84,838	15,804	10,710	878	16,961	4,560	2,835	27,494	14,723	37,108	14,118	230,029
Shipments	57,528	10,727	8,776	362	10,119	2,314	1,636	19,192	6,651	33,040	5,183	155,528
Average, 1909–1913:												
Receipts	105,459	10,251	7,581	792	22,314	4,383	2,957	19,052	16,710	......	......	214,364
Shipments	75,688	7,728	5,366	701	13,935	2,273	1,696	14,209	10,859	......	......	149,044
1914–15:												
Receipts	116,348	19,609	14,699	3,036	18,626	4,582	4,058	16,396	16,736	24,599	15,087	253,776
Shipments	80,256	16,985	11,997	3,036	10,206	2,594	3,021	11,914	6,831	23,117	6,498	176,455
1915–16:												
Receipts	101,325	9,887	5,661	(2)	17,974	4,656	4,726	25,837	35,948	21,496	22,790	250,300
Shipments	62,148	6,943	3,927	(2)	8,678	1,422	3,139	22,459	13,722	15,948	11,073	149,459
1916–17:												
Receipts	78,723	12,755	9,550	32	21,312	2,882	3,192	12,743	31,533	29,820	24,421	226,963
Shipments	40,497	8,681	7,779	6	13,191	1,190	2,425	8,469	11,870	25,179	14,801	134,088
1917–18:												
Receipts	98,786	12,374	16,715	177	25,354	2,609	4,361	31,366	36,176	46,159	20,583	294,660
Shipments	34,540	7,006	9,636	170	16,130	1,160	717	24,481	17,062	36,355	9,206	156,463
1918–19:												
Receipts	61,366	6,784	6,621	6	19,219	1,127	1,633	16,146	18,511	21,805	15,905	169,123
Shipments	32,019	3,697	4,773	(2)	11,956	549	626	10,345	10,530	21,197	7,130	102,822
1919–20:												
Receipts	87,641	14,652	9,192	5	27,595	2,122	1,671	11,218	22,449	23,227	19,991	219,763
Shipments	37,236	7,079	6,384	(2)	15,975	1,298	481	5,034	17,660	18,604	7,170	116,921
1920–21:												
Receipts	167,241	27,455	12,066	4,834	25,924	3,194	1,663	14,137	16,091	20,012	17,505	310,122
Shipments	113,374	21,823	8,483	3,777	17,044	1,349	261	9,742	9,823	17,356	6,353	209,385
Average, 1914–1920:												
Receipts	101,633	14,788	10,643	......	22,286	3,025	3,043	18,263	25,349	26,731	19,469	246,387
Shipments	57,153	10,316	7,568	......	13,311	1,366	1,533	13,206	12,500	22,537	8,890	149,370
1921–22:												
Receipts	186,815	25,630	15,920	14,111	33,809	3,994	2,454	16,063	24,116	29,583	21,665	374,160
Shipments	115,700	22,168	12,048	14,034	22,713	1,795	903	10,242	18,295	26,047	7,053	250,998

[1] Compiled from Chicago Daily Trade Bulletin.

[2] No report.

CORN—Continued.

TABLE 11.—*Corn: Monthly and yearly receipts and shipments, 11 primary markets, 1909–10 to 1921–22*—Continued.

Month	Chicago	Milwaukee	Minneapolis	Duluth	St. Louis	Toledo	Detroit	Kansas City	Peoria	Omaha	Indianapolis	Total
1921	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*
November:												
Receipts	6,598	607	574	265	1,697	190	114	365	1,255	619	1,821	14,105
Shipments	5,037	1,762	305	1,260	1,105	50	42	277	805	639	585	11,867
December:												
Receipts	19,618	3,890	2,095	1,503	3,905	495	297	2,062	2,835	3,208	2,731	42,639
Shipments	7,294	1,475	1,227	234	1,740	167	87	1,372	1,827	2,518	978	18,919
1922												
January:												
Receipts	24,713	2,987	2,253	1,445	3,944	685	274	1,513	2,576	3,992	2,155	46,537
Shipments	12,931	1,987	1,266	......	2,056	390	173	983	2,137	2,974	816	25,713
February:												
Receipts	33,348	3,567	2,613	1,753	4,293	636	504	2,232	4,080	3,051	3,481	59,558
Shipments	19,130	1,230	1,074	1	2,147	375	150	1,063	3,200	2,293	804	31,467
March:												
Receipts	14,288	2,626	2,462	2,171	2,748	373	276	2,029	1,912	3,358	1,687	33,930
Shipments	13,849	2,015	1,505	37	2,466	170	111	861	1,505	3,184	682	26,385
April:												
Receipts	5,256	960	564	379	1,154	138	138	1,102	1,019	1,807	671	13,188
Shipments	2,115	2,729	793	58	1,159	82	79	563	540	2,277	307	10,702
May:												
Receipts	8,424	2,296	993	869	2,362	170	145	1,577	1,598	2,668	863	21,965
Shipments	5,750	2,623	1,446	5,843	1,927	159	102	810	946	2,640	405	22,651
June:												
Receipts	15,876	2,835	2,034	2,253	3,148	274	165	2,239	1,879	2,672	1,906	35,281
Shipments	4,616	3,694	1,408	2,975	2,472	73	58	616	1,185	2,944	557	20,598
July:												
Receipts	11,362	1,217	775	1,472	2,931	119	80	987	689	1,925	918	22,475
Shipments	11,243	1,286	1,920	1,353	2,075	105	12	1,056	840	1,955	367	22,212
August:												
Receipts	11,795	999	680	732	2,931	261	171	978	1,685	2,958	1,518	24,708
Shipments	12,211	660	657	1,551	2,185	31	2	1,443	1,546	2,298	227	22,811
September:												
Receipts	19,137	1,995	402	872	2,509	356	182	428	2,060	1,573	1,609	31,123
Shipments	8,952	1,068	273	498	1,617	107	32	660	1,758	1,167	615	16,747
October:												
Receipts	16,400	1,651	475	397	2,187	297	108	551	2,528	1,752	2,305	2,651
Shipments	12,572	1,639	174	224	1,764	86	55	538	2,006	1,158	710	20,926

OATS.

TABLE 12.—*Oats: Acreage, production, and total farm value, by States, 1920–1922.*

State	Thousands of acres			Production (thousands of bushels)			Total value, basis Dec. 1 price (thousands of dollars)		
	1920	1921	1922 [1]	1920	1921	1922 [1]	1920	1921	1922 [1]
Maine	119	124	130	4,974	4,340	4,940	4,228	2,387	2,322
New Hampshire	18	18	18	702	630	684	526	378	410
Vermont	81	81	87	2,835	2,673	3,132	2,126	1,577	1,754
Massachusetts	9	9	10	306	279	340	245	165	214
Rhode Island	1	1	1	28	28	31	22	17	19
Connecticut	11	11	11	330	330	308	248	198	200
New York	1,059	1,038	1,059	40,772	24,912	31,770	27,317	11,709	16,203
New Jersey	72	72	72	2,304	1,728	2,232	1,728	778	1,228
Pennsylvania	1,210	1,238	1,213	47,190	35,283	41,242	31,145	15,877	19,796
Delaware	7	6	7	231	168	161	162	77	92
Maryland	50	60	58	1,625	1,620	1,740	1,138	729	887
Virginia	148	163	166	3,241	3,342	3,320	2,625	1,872	1,959
West Virginia	200	210	200	5,400	4,620	4,600	4,266	2,402	2,668
North Carolina	154	170	178	3,388	3,060	3,738	3,252	2,142	2,504
South Carolina	307	338	406	7,368	8,112	9,744	7,589	5,922	7,405
Georgia	344	412	474	7,224	8,652	8,532	7,802	5,537	6,399
Florida	41	41	37	697	533	481	418	346	327
Ohio	1,540	1,550	1,472	68,068	35,650	39,744	34,034	11,764	17,885
Indiana	1,875	1,912	1,370	76,875	45,888	28,770	35,362	13,308	11,508
Illinois	4,334	4,594	3,860	171,193	121,741	110,010	73,613	35,305	42,904
Michigan	1,485	1,544	1,498	58,806	28,101	49,434	28,227	10,116	20,268
Wisconsin	2,408	2,632	2,465	107,878	63,958	101,558	52,860	21,106	39,608
Minnesota	3,702	4,145	4,021	138,825	99,480	142,746	49,977	22,880	45,679
Iowa	5,894	6,340	6,023	229,866	164,840	222,851	82,752	37,913	77,998
Missouri	1,918	2,148	1,117	58,499	42,960	17,872	28,665	12,888	7,864
North Dakota	2,518	2,568	2,388	60,432	48,792	78,804	21,151	10,246	20,489
South Dakota	2,219	2,650	2,400	75,446	58,300	74,400	24,897	11,660	23,808
Nebraska	2,400	2,585	2,408	83,040	70,054	56,106	30,725	14,711	19,076
Kansas	2,127	1,894	1,494	65,299	38,827	28,386	25,467	10,483	11,638
Kentucky	280	293	234	6,580	5,567	4,282	4,803	2,672	2,398
Tennessee	250	260	229	4,950	5,330	4,351	3,861	2,558	2,306
Alabama	246	308	277	4,428	6,776	5,540	3,897	4,404	4,155
Mississippi	128	147	140	2,176	2,940	2,660	1,893	1,882	1,756
Louisiana	50	55	56	1,150	1,265	1,249	943	886	862
Texas	1,490	1,865	1,455	32,780	33,570	33,465	21,635	13,092	18,406
Oklahoma	1,650	1,765	1,500	54,450	35,300	30,000	23,958	9,531	13,500
Arkansas	290	300	264	7,250	6,600	6,336	5,655	2,970	3,612
Montana	533	618	600	11,726	14,832	19,200	5,980	5,043	7,104
Wyoming	115	150	158	4,370	4,500	5,056	2,709	1,710	2,022
Colorado	204	217	185	6,426	6,727	4,625	3,856	2,220	2,081
New Mexico	61	61	62	1,671	1,690	930	1,337	811	539
Arizona	13	18	20	351	630	620	337	410	422
Utah	77	79	86	2,603	2,876	3,354	2,082	1,064	1,576
Nevada	3	3	3	112	113	112	134	85	84
Idaho	185	180	162	7,030	7,740	6,156	4,780	2,477	2,832
Washington	210	210	202	9,786	10,500	7,959	7,046	4,410	4,616
Oregon	300	272	267	10,950	8,704	6,675	7,118	3,308	3,805
California	155	140	150	4,650	3,780	5,250	3,720	1,928	3,360
United States	42,491	45,495	40,693	1,496,281	1,078,341	1,215,496	688,311	325,954	478,548

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[1] Preliminary estimate.

OATS—Continued.

TABLE 13.—*Oats: Area and production in undermentioned countries, 1909–1922.*[1]

Country	Area				Production			
	Average, 1909–1913	1920	1921	1922[2]	Average, 1909–1913	1920	1921	1922[2]
NORTHERN HEMISPHERE								
NORTH AMERICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
United States[2]	37,357	42,491	44,826	41,822	1,143,407	1,496,281	1,060,737	1,229,774
Canada[3]	9,597	15,850	16,949	16,056	351,690	530,710	426,233	558,358
Mexico	....	....	....	....	17	....	....	....
Total North American countries marked[3]	46,954	58,341	61,775	57,878	1,495,097	2,026,991	1,486,970	1,788,132
EUROPE								
United Kingdom:								
England and Wales[3]	2,039	2,266	2,148	2,161	82,024	85,968	80,264	74,800
Scotland	952	1,032	1,012	987	37,670	41,256	38,344	....
Ireland	1,049	1,332	1,254	....	63,083	53,648	46,144	....
Norway	266	342	342	....	10,245	15,078	12,960	....
Sweden[3]	1,969	1,752	1,757	1,757	79,115	69,914	76,598	72,498
Denmark[3]	1,028	1,091	1,112	1,118	43,115	50,794	52,158	51,740
Netherlands[3]	346	395	383	392	18,512	20,443	20,001	16,430
Belgium[3]	644	586	603	701	40,905	33,865	35,225	27,558
Luxemburg	77	62	64	66	3,382	1,849	1,243	....
France[3]	[4] 9,801	8,278	8,421	7,905	[4] 310,020	291,406	244,455	288,250
Spain[3]	1,276	1,588	1,575	1,512	29,110	37,772	35,616	34,926
Italy[3]	[4] 1,253	1,159	1,199	1,212	[4] 36,945	24,223	[5] 38,401	30,589
Switzerland[3]	81	56	52	51	4,784	3,118	3,038	2,466
Germany[3]	[4] 10,750	7,940	7,814	7,905	[4] 591,996	332,490	344,812	284,585
Austria	[4] 4,613	627	662	....	[4] 143,392	15,974	18,643	....
Czechoslovakia	....	1,981	1,963	2,021	....	59,654	74,087	64,520
Hungary[3]	[4] 2,669	802	806	818	[4] 85,840	22,307	21,964	22,528
Yugoslavia[3]	....	1,029	1,003	954	....	22,242	18,906	16,200
Serbia[3]	[4] 266	....	....	....	[4] 5,443	....	....	....
Croatia-Slovonia[3]	[4] 246	....	....	....	[4] 5,216	....	....	....
Bosnia-Herzegovina[3]	225	....	....	....	[4] 4,973	....	....	....
Greece	....	273	....	....	....	3,996	4,134	....
Bulgaria[3]	[4] 455	345	407	366	[4] 9,880	7,004	9,301	9,370
Rumania[3]	[4] 1,105	2,173	3,063	3,294	[4] 27,545	60,979	55,350	86,117
Poland[3]	[4] 2,858	4,118	4,753	5,718	[4] 76,590	129,061	150,286	182,960
Lithuania	....	....	766	....	....	....	18,154	....
Latvia	....	533	622	675	....	7,784	16,843	17,792
Esthonia	....	....	353	....	....	....	8,840	....
Finland[3]	[6] 987	1,013	1,038	988	[4] 21,989	24,561	28,029	28,647
Russia, including Ukraine and North-Caucasia	[4] 39,203	....	....	....	[4] 904,547	....	....	....
Total European countries marked[3]	37,998	34,591	36,134	36,852	1,474,002	1,216,147	1,214,404	1,229,664
ASIA								
Cyprus	....	....	....	....	429	....	....	....
Japan	....	282	....	306	....	11,162	12,086	13,434
Russia (Asiatic)	[4] 4,912	....	....	....	[4] 87,403	....	....	....
Total Asia marked[3]	....	....	....	....	....	....	....	....

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[1] Official sources unless otherwise stated.
[2] Figures for 1922 and 1921-22 compiled from reports received up to Nov. 1, 1922.
[3] Indicates countries reporting for all periods given either as listed or as part of some other country.
[4] Old boundaries.
[5] Includes 627,000 bushels grown in the new territory of Venezia Tridentina and Venezia Giulia.
[6] One year only.

OATS—Continued.

TABLE 13.—*Oats: Area and production in undermentioned countries, 1909–1922*—Continued.

Country	Area				Production			
	Average, 1909–1913	1920	1921	1922	Average, 1909–1913	1920	1921	1922
NORTHERN HEMISPHERE—Continued								
AFRICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
French Morocco	....	6	....	....	....	228	....	....
Algeria [3]	[4] 456	578	558	583	12,950	6,855	10,334	5,570
Tunis [3]	141	150	165	119	4,333	1,481	4,134	964
Total African countres marked [3]	597	728	723	702	17,283	8,336	14,468	6,534
Total Northern Hemisphere countries marked [3]	85,549	93,660	98,632	95,432	2,986,382	3,251,474	2,715,842	3,024,330
Country	Average, 1908–9 to 1912–13	1919–20	1920–21	1921–22 [2]	Average, 1908–9 to 1912–13	1919–20	1920–21	1921–22 [2]
SOUTHERN HEMISPHERE								
Chile [3]	68	64	60	79	2,934	2,590	3,155	3,144
Uruguay [3]	46	81	76	107	830	1,479	1,989	2,069
Argentina [3]	1,999	2,301	2,061	2,105	52,122	57,113	47,619	32,973
Union of South Africa [3]	[5] 809	558	564	530	7,197	7,519	7,789	8,103
Australia	708	1,068	937	....	14,851	12,556	18,521	....
New Zealand [3]	376	180	148	171	13,664	6,968	5,225	6,753
Total southern hemisphere countries marked [3]	3,298	3,184	2,909	2,992	76,747	75,669	65,777	53,042
Total world countries marked [3]	88,847	96,844	101,541	98,424	3,063,129	3,327,143	2,781,619	3,077,372
World total all countries reporting	140,627	104,382	109,516	102,479	4,328,148	3,550,328	3,051,618	3,173,118

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[1] Official sources unless otherwise stated.

[2] Figures for 1922 and 1921–22 compiled from reports received up to Nov. 1, 1922.

[3] Indicates countries reporting for all periods given either as listed or as part of some other country.

[4] Four-year average.

[5] One year only.

TABLE 14.—*Oats: Total production in countries as far as reported, 1895–1922.*

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		*Bushels*		*Bushels*		*Bushels*
1895	3,008,154,000	1902	3,626,303,000	1909	4,312,882,000	1916	[1] 3,484,071,000
1896	2,847,115,000	1903	3,378,034,000	1910	4,182,410,000	1917	[2] 3,006,747,000
1897	2,633,971,000	1904	3,611,302,000	1911	3,808,561,000	1918	[2] 3,112,522,000
1898	2,903,974,000	1905	3,510,167,000	1912	4,617,394,000	1919	[2] 2,857,897,000
1899	3,256,256,000	1906	3,544,961,000	1913	4,697,437,000	1920	[2] 3,550,328,000
1900	3,166,002,000	1907	3,603,896,000	1914	4,034,857,000	1921	[2] 3,051,618,000
1901	2,862,615,000	1908	3,591,012.000	1915	4,306,550,000	1922	[2] 3,173,118,000

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[1] Germany not included. In 1915 Germany produced about 10 per cent of the reported world production.

[2] Russia not included. In 1915 Russia produced about 20 per cent of the reported world production.

OATS—Continued.

TABLE 15.—*Oats: Average yield per acre in undermentioned countries, 1890–1922.*

Year	United States	Russia (European)	Germany	Austria	Hungary proper	France	United Kingdom[1]
Average:	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*
1890–1899	26.1	17.8	40.0	25.3	....	29.8	43.6
1900–1909	29.3	20.0	50.7	29.8	30.7	33.0	44.3
1910–1919	32.1	[2] 22.2	47.5	29.3	[3] 34.8	32.8	43.1
1919	29.3	....	41.9	22.4	....	24.6	42.9
1920	35.2	....	41.9	25.5	27.8	35.2	39.1
1921	23.7	....	44.1	28.2	27.3	29.0	37.3
1922	29.4	....	36.0	....	27.5	36.5	....

[1] Winchester bushels. [2] Seven-year average. [3] Six-year average.

TABLE 16.—*Oats: Acreage, production, value, exports, etc., in the United States, 1849–1922.*

(See headnote of table 5)

Year	Acreage harvested	Average yield per acre	Production	Average farm price per bu. Dec. 1	Farm value Dec. 1	Chicago cash price per bushel, contract[1]				Domestic exports, including oatmeal, fiscal year beginning July 1[2]	Imports, during fiscal year beginning July 1[3]
						Dec.		Following May			
						Low	Hi	Low	Hi		
	1,000 acres	*Bush.*	*1,000 bushels*	*Cents*	*1,000 dollars*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Bushels*	*Bushels*
1849	....	......	*146,584*	......	....	....	....	....	....	....	....
1859	....	......	*172,643*	......	....	....	....	....	....	....	....
1866–1875	9,680	28.2	272,993	37.5	102,423	38	42	45	52	546,033	732,615
1876–1885	17,143	27.4	469,856	32.5	152,594	29	33	33	38	3,106,723	366,123
1886–1895	27,482	26.1	717,266	29.4	207,143	27	29	28	32½	5,607,237	111,587
1896	29,645	26.3	780,124	18.3	142,772	16½	18¾	16⅞	18	37,725,083	131,204
1897	28,353	27.9	791,442	20.8	164,836	21	23⅞	26	32	73,880,307	25,093
1898	28,769	29.3	842,747	25.2	212,482	26	27¾	24	27¾	33,534,362	28,098
1899	*29,540*	31.3	925,555	24.5	226,588	22¼	23	21¼	23¾	45,048,857	54,576
1900	30,290	30.2	913,800	25.4	232,074	21¾	22¾	27⅞	31	42,268,931	32,107
1901	29,894	26.0	778,392	39.7	308,796	42	48¼	41	49½	13,277,612	38,978
1902	30,578	34.5	1,053,489	30.6	322,423	29¼	32	33⅜	38¼	8,381,805	150,065
1903	30,866	28.2	869,350	34.0	295,232	34¼	38	39⅝	44¾	1,960,740	183,983
1904	31,353	32.2	1,008,931	31.1	313,488	28¼	32	28⅝	32	8,394,692	55,699
1905	32,072	34.0	1,090,236	28.9	314,868	29½	32¾	32⅛	34¾	48,434,541	40,025
1906	33,353	31.0	1,035,576	31.9	329,853	33	35¾	44½	48½	6,386,334	91,289
1907	33,641	23.9	805,108	44.5	358,421	46½	50⅞	52¾	56½	2,518,855	383,418
1908	34,006	25.0	850,540	47.3	402,010	48⅜	50½	56¼	62½	2,333,817	6,691,700
1909	*35,159*	30.4	1,068,289	40.6	433,869	40	45	36½	43¼	2,548,726	1,034,511
1910[4]	37,548	31.6	1,186,341	34.4	408,388	31	32½	31⅞	36	3,845,850	107,318
1911	37,763	24.4	922,298	45.0	414,663	46¼	47⅜	50½	58	2,677,749	2,622,357
1912	37,917	37.4	1,418,337	31.9	452,469	31	31¾	35⅛	43	36,455,474	723,899
1913	38,399	29.2	1,121,768	39.2	439,596	37⅝	40⅛	37	42½	2,748,743	22,273,624
9114	38,442	29.7	1,141,060	43.8	499,431	46⅞	49¾	50½	56	100,609,272	630,722
1915	40,996	37.8	1,549,030	36.1	559,506	40⅞	44	39½	49½	98,960,481	665,314
1916	41,527	30.1	1,251,837	52.4	655,928	46¾	54	59½	74	95,105,698	761,644
1917	43,553	36.6	1,592,740	66.6	1,061,474	70¼	80⅝	72	79½	125,090,611	2,591,077
1918	44,349	34.7	1,538,124	70.9	1,090,322	68	74½	67⅞	74¼	109,004,734	551,355
1919	40,359	29.3	1,184,030	70.4	833,922	77	89	100½	117¼	43,435,994	6,043,834
1920[4]	42,491	35.2	1,496,281	46.0	688,311	47	52	36¾	43¼	9,391,096	3,795,638
1921	45,495	23.7	1,078,341	30.2	325,954	32¼	42	37¼	45	21,016,742	1,733,282
1922[5]	40,693	29.9	1,215,496	39.4	478,548	41½	42½	....	....	....	....

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[1] Quotations are for No. 2 to 1906.

[2] Oatmeal not included until 1882.

[3] Oatmeal not included 1867–1882, and 1909.

[4] Acreage adjusted to census basis.

[5] Preliminary estimate.

OATS—Continued.

TABLE 17.—*Oats: Yield per acre, price per bushel December 1, and value per acre, by States.*

State	Yield per acre (bushels)						Farm price per bushel (cents)											Value per acre (dollars)[1]	
	5-year average, 1918–1922	1918	1919	1920	1921	1922	10-year average, 1913–1922	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	5-year average 1917–1921	1922
Maine	37.8	40.0	34.0	41.8	35.0	38.0	68	55	57	45	67	85	90	92	85	55	47	29.34	17.86
New Hampshire	36.6	38.0	33.0	39.0	35.0	38.0	69	56	58	54	69	84	87	85	75	60	60	28.66	22.80
Vermont	34.9	41.0	29.5	35.0	33.0	36.0	68	52	55	53	65	85	90	90	75	59	56	27.95	20.16
Massachusetts	34.4	40.0	33.0	34.0	31.0	34.0	69	54	56	51	66	81	91	90	80	59	63	28.31	21.42
Rhode Island	31.8	42.0	30.0	28.0	28.0	31.0	69	50	58	50	68	75	90	95	80	60	60	25.75	18.60
Connecticut	31.1	38.0	29.5	30.0	30.0	28.0	69	55	55	55	69	79	90	88	75	60	65	25.35	18.20
New York	31.8	41.0	25.5	38.5	24.0	30.0	61	47	51	45	62	75	84	83	67	47	51	23.79	15.30
New Jersey	31.4	40.0	30.0	32.0	24.0	31.0	61	47	54	48	61	70	79	80	75	45	55	22.84	17.05
Pennsylvania	34.3	39.0	31.0	39.0	28.5	34.0	59	46	51	44	57	73	80	80	66	45	48	24.02	16.32
Delaware	28.4	35.0	23.0	33.0	28.0	23.0	64	51	50	51	62	78	87	90	70	46	57	22.42	13.11
Maryland	30.1	33.0	28.0	32.5	27.0	30.0	62	48	52	49	61	75	86	82	70	45	51	21.90	15.30
Virginia	21.5	23.0	22.0	21.9	20.5	20.0	71	52	58	55	63	84	100	100	81	56	59	18.96	11.80
West Virginia	24.0	27.0	21.0	27.0	22.0	23.0	67	51	55	51	64	79	91	91	79	52	58	19.56	13.34
North Carolina	18.9	17.0	16.7	22.0	18.0	21.0	80	61	65	62	74	93	108	106	96	70	67	16.93	14.07
South Carolina	23.4	22.0	23.0	24.0	24.0	24.0	87	71	71	67	80	100	118	110	103	73	76	21.70	18.24
Georgia	20.0	20.0	20.0	21.0	21.0	18.0	88	68	70	66	79	117	119	115	108	64	75	20.33	13.50
Florida	15.2	18.0	15.0	17.0	13.0	13.0	81	70	70	70	71	98	115	120	60	65	68	14.21	8.84
Ohio	34.2	44.0	33.0	44.2	23.0	27.0	51	40	45	36	53	64	70	72	50	33	45	22.48	12.15
Indiana	32.0	42.0	32.0	41.0	24.0	21.0	48	38	43	34	51	63	67	69	46	29	40	20.50	8.40
Illinois	33.7	44.0	30.0	39.5	26.5	28.5	48	38	44	35	51	65	67	70	43	29	39	21.79	11.12
Michigan	31.2	40.0	25.0	39.6	18.2	33.0	50	39	45	35	53	64	69	71	48	36	41	18.79	13.53
Wisconsin	38.1	46.6	33.4	44.8	24.3	41.2	49	37	43	36	51	66	67	70	49	33	39	22.72	16.07
Minnesota	33.2	41.0	28.0	37.5	24.0	35.5	43	32	40	32	47	63	63	64	36	23	32	17.22	11.36
Iowa	35.7	42.0	34.6	39.0	26.0	37.0	44	34	41	32	48	63	64	64	36	23	35	19.73	12.95
Missouri	24.5	29.0	27.0	30.5	20.0	16.0	50	45	44	38	53	61	70	71	49	30	44	16.96	7.04
North Dakota	23.0	23.5	15.5	24.0	19.0	33.0	41	30	37	27	44	62	61	67	35	21	26	9.28	8.58
South Dakota	31.0	39.0	29.0	34.0	22.0	31.0	41	34	38	28	46	61	59	63	33	20	32	15.53	9.92
Nebraska	28.0	22.2	32.8	34.6	27.1	23.3	44	38	40	31	47	61	65	65	37	21	34	15.48	7.92
Kansas	24.1	22.0	28.1	30.7	20.5	19.0	50	45	42	37	55	64	73	73	39	27	41	14.78	7.79
Kentucky	21.5	24.0	22.5	23.5	19.0	18.3	65	52	53	48	60	76	90	91	73	48	56	17.62	10.25
Tennessee	20.6	25.0	18.5	19.8	20.5	19.0	67	53	53	50	62	83	93	93	78	48	53	17.30	10.07
Alabama	19.4	19.0	18.0	18.0	22.0	20.0	82	69	69	63	75	102	107	105	88	65	75	17.55	15.00
Mississippi	18.4	20.0	16.0	17.0	20.0	19.0	78	63	65	60	74	94	107	105	87	64	66	16.73	12.54
Louisiana	23.1	25.0	22.0	23.0	23.0	22.3	76	57	63	55	68	94	99	100	82	70	69	20.53	15.39
Texas	23.9	14.7	42.0	22.0	18.0	23.0	60	51	48	42	61	82	92	64	66	39	55	16.65	12.65
Oklahoma	25.8	24.0	32.0	33.0	20.0	20.0	52	45	41	35	57	75	84	70	44	27	45	15.95	9.00
Arkansas	23.7	25.5	22.0	25.0	22.0	24.0	66	53	53	52	68	75	88	88	78	45	57	18.44	13.68
Montana	22.8	30.0	6.0	22.0	24.0	32.0	52	32	39	32	47	81	80	91	51	34	37	13.01	11.84
Wyoming	30.6	41.0	12.0	38.0	30.0	32.0	60	40	48	43	60	80	80	112	62	38	40	22.00	12.80
Colorado	28.7	30.0	26.2	31.5	31.0	25.0	57	44	45	41	60	76	80	90	60	33	45	21.12	11.25
New Mexico	25.1	28.0	27.4	27.4	27.7	15.0	68	60	45	50	67	84	89	95	80	48	58	22.27	8.70
Arizona	33.6	40.0	35.0	27.0	35.0	31.0	81	50	70	64	80	96	120	100	96	65	68	34.01	21.08
Utah	36.4	45.0	27.9	33.8	36.4	39.0	63	40	43	45	61	85	97	98	80	37	47	29.78	18.33
Nevada	35.1	38.0	25.3	37.2	37.7	37.2	83	65	55	55	75	96	118	100	120	75	75	36.29	27.90
Idaho	37.8	40.0	30.0	38.0	43.0	38.0	57	32	38	34	54	77	94	98	68	32	46	27.17	17.48
Washington	40.6	27.0	40.0	46.6	50.0	39.4	61	40	42	37	51	81	98	93	72	42	58	29.88	22.85
Oregon	30.0	25.0	31.3	36.5	32.0	25.0	59	38	45	37	49	75	96	92	65	38	57	21.49	14.25
California	30.6	32.0	29.0	30.0	27.0	35.0	70	60	53	50	72	85	94	96	80	51	64	25.09	22.40
United States	30.6	34.7	29.3	35.2	23.7	29.9	49.5	39.2	43.8	36.1	52.4	66.6	70.9	70.4	46.0	30.2	39.4	18.60	11.76

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[1] Based upon farm price December 1.

OATS—Continued.

TABLE 18.—*Oats: Production and distribution in the United States. 1897–1922.*

Year	Old stock on farms Aug. 1	Crop			Total supplies	Stock on farms Mar. 1 following	Shipped out of county where grown
		Quantity	Weight per bushel	Quality			
	1,000 bushels	*1,000 bushels*	*Pounds*	*Per cent*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
1897–1901	62,020	850,387	30.7	86.9	912,407	309,996	238,934
1902–1906	59,577	1,011,516	31.4	87.7	1,071,094	387,728	277,254
1907	73,196	805,108	29.4	77.0	878,304	258,104	221,147
1908	40,528	850,540	29.8	81.3	891,068	294,082	253,929
1909	27,478	1,068,289	32.7	91.4	1,095,767	385,705	343,968
1910	66,666	1,186,341	32.7	93.8	2,253,007	442,665	363,103
1911	67,801	922,298	31.1	84.6	990,099	289,989	265,944
1912	34,875	1,418,337	33.0	91.0	1,453,212	604,249	438,130
1913	103,916	1,121,768	32.1	89.1	1,225,684	419,481	297,365
1914	62,467	1,141,060	31.5	86.5	1,203,527	379,369	335,539
1915	55,607	1,549,030	33.0	87.5	1,604,637	598,148	465,823
1916	113,728	1,251,837	31.2	88.2	1,365,565	394,211	355,092
1917	47,834	1,592,740	33.4	95.1	1,640,574	599,208	514,117
1918	81,424	1,538,124	33.2	93.6	1,619,548	590,251	421,568
1919	93,045	1,184,030	31.1	84.7	1,277,075	409,730	312,364
1920	54,819	1,496,281	33.1	93.3	1,551,100	683,759	431,687
1921	161,108	1,078,341	28.3	74.7	1,239,449	411,934	258,259
1922	74,513	1,215,496	32.0	87.7	1,290,009	421,511	304,558

TABLE 19.—*Oats: Monthly and yearly average price per bushel of reported sales of No. 3 white, 1909–10 to 1921–22.*

CHICAGO.[1]

Crop year	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Weighted average
1909–10	$0.38	$0.39	$0.40	$0.40	$0.44	$0.48	$0.47	$0.44	$0.42	$0.40	$0.38	$0.41	$0.42
1910–11	.35	.34	.32	.32	.32	.33	.31	.31	.32	.34	.39	.44	.33
1911–12	.41	.45	.47	.48	.47	.50	.52	.53	.57	.55	.53	.49	.50
1912–13	.33	.33	.33	.32	.33	.33	.33	.32	.35	.38	.40	.40	.35
1913–14	.42	.43	.40	.04	.40	.39	.39	.39	.39	.40	.40	.37	.40
Average, 1909–1913	.38	.39	.38	.38	.39	.41	.40	.40	.40	.41	.42	.42	.40
1914–15	.42	.48	.46	.48	.49	.53	.58	.57	.57	.54	.49	.53	.50
1915–16	.41	.34	.36	.36	.42	.48	.45	.42	.44	.43	.39	.41	.41
1916–17	.44	.46	.49	.55	.53	.57	.56	.61	.69	.70	.67	.78	.54
1917–18	.61	.60	.60	.65	.77	.82	.89	.93	.89	.77	.77	.77	.71
1918–19	.70	.72	.69	.72	.72	.65	.58	.63	.70	.69	.70	.78	.70
1919–20	.73	.68	.70	.73	.82	.86	.86	.93	1.01	1.09	1.13	.91	.80
1920–21	.70	.62	.54	.51	.48	.44	.42	.42	.36	.39	.37	.34	.51
Average, 1914—1920	.57	.56	.55	.57	.60	.62	.62	.64	.67	.66	.65	.65	.60
1921–22	.32	.35	.31	.33	.34	.34	.36	.36	.38	.38	.37	.36	.35

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[1] Compiled from Chicago Daily Trade Bulletin.

OATS—Continued.

TABLE 20.—*Oats: Farm price, cents per bushel on 1st of each month, 1908–1922.*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average [1]
1908	46.1	47.0	47.9	50.0	50.4	51.8	50.2	49.8	47.2	47.2	46.5	47.2	47.9
1909	48.1	48.1	51.1	53.2	55.3	57.4	56.2	50.0	42.3	41.0	41.0	40.2	46.4
1910	42.8	45.0	46.0	45.6	43.3	43.0	42.1	41.7	38.4	36.2	34.9	34.4	39.9
1911	33.2	33.1	32.8	32.3	33.2	34.7	37.5	40.2	40.4	42.5	43.8	45.0	38.7
1912	45.1	47.5	49.8	52.0	56.0	55.3	52.5	44.3	35.0	33.6	33.6	31.9	41.4
1913	32.2	32.4	33.1	33.1	34.2	36.0	37.7	37.6	39.3	39.6	37.9	39.2	36.8
1914	39.1	39.3	38.9	39.5	39.5	40.0	38.8	36.7	42.3	43.3	42.9	43.8	40.9
1915	45.0	50.1	52.1	53.4	53.4	51.3	46.7	45.4	38.5	34.5	34.9	36.1	42.5
1916	39.1	44.6	42.7	42.0	42.6	42.1	40.4	40.1	43.1	44.5	49.0	52.4	44.0
1917	51.4	55.2	56.9	61.5	71.0	69.9	68.9	73.7	61.7	62.3	61.7	66.6	62.7
1918	73.9	78.7	86.2	88.9	86.0	78.1	76.3	73.0	70.3	71.0	68.2	70.9	74.6
1919	70.8	64.3	62.6	65.8	70.9	71.2	70.9	75.3	71.7	68.4	68.7	70.4	69.4
1920	78.2	82.7	84.5	90.7	98.3	102.9	104.5	81.9	70.2	60.7	54.5	46.0	74.0
1921	45.6	41.8	41.9	39.3	36.8	37.9	35.6	33.8	30.1	31.0	29.2	30.2	34.7
1922	31.0	32.8	36.6	36.5	37.9	38.4	37.3	35.0	32.2	34.5	38.2	39.4	36.3
Average, 1913–1922	50.6	52.2	53.6	55.1	57.1	56.8	55.7	53.2	49.9	49.0	48.5	49.5	51.6

[1] Weighted average

TABLE 21.—*Oats: Monthly marketings by farmers, 1917–1922.*

Year	Estimated amount sold monthly by farmers of United States (millions of bushels)												
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season
1917–18	24	82	67	56	38	39	42	40	35	33	20	24	500
1918–19	34	82	50	42	30	28	28	19	23	27	29	28	420
1919–20	47	60	33	30	19	27	26	21	16	14	17	15	325
1920–21	36	80	59	41	24	25	28	28	26	20	29	34	430
1921–22	38	41	30	20	13	15	18	17	14	11	18	15	250
Average	36	69	48	38	25	23	28	25	23	21	23	23	382
	Per cent of year's sales												
1917–18	4.7	16.4	13.5	11.1	7.7	7.8	8.3	8.0	7.1	6.5	4.0	4.9	100.0
1918–19	8.0	19.6	11.9	9.9	7.2	6.7	6.7	4.5	5.5	6.3	7.0	6.7	100.0
1919–20	14.4	18.4	10.1	9.2	5.8	8.3	8.2	6.6	4.9	4.3	5.2	4.6	100.0
1920–21	8.3	18.7	13.8	9.5	5.5	5.8	6.6	6.6	6.0	4.6	6.8	7.8	100.0
1921–22	15.1	16.5	11.8	7.9	5.3	6.1	7.3	6.9	5.6	4.3	7.2	6.0	100.0
Average	10.1	18.0	12.2	9.5	6.3	7.0	7.4	6.5	5.8	5.2	6.0	6.0	100.0

OATS—Continued.

TABLE 22.—*Oats: Monthly and yearly receipts and shipments, 11 primary markets, 1909–10 to 1921–22.*[1]

(In thousands of bushels; i.e., 000 omitted.)

	Chicago	Milwaukee	Minneapolis	Duluth	St. Louis	Toledo	Detroit	Kansas City	Peoria	Omaha	Indianapolis	Total
Year												
1909–10:												
Receipts	85,999	9,496	15,599	7,806	20,048	3,670	2,488	5,165	10,875	(2)	(2)	161,146
Shipments	72,501	7,433	14,531	7.432	14,765	3,162	383	4,508	11,705	(2)	(2)	136,420
1910–11:												
Receipts	107,902	14,844	18,419	2,434	20,517	3,709	3,073	6,280	10,130	(2)	(2)	187,308
Shipments	89,705	14,873	13,845	2,824	15,323	3,435	265	4,066	10,895	(2)	(2)	155,231
1911–12:												
Receipts	87,623	10,863	10,555	4,529	16,879	2,872	2,752	6,018	6,658	8,868	976	158,593
Shipments	70,090	8,194	10,043	4,639	11,280	2,611	348	5,071	8,737	9,258	394	130,665
1912–13:												
Receipts	177,103	16,252	19,031	9,350	23,785	3,637	3,535	7,704	11,447	14,958	8,136	294,938
Shipments	116,275	20,180	16,397	8,351	16,592	4,365	514	7,523	13,188	14,802	2,876	221,063
1913–14:												
Receipts	105,738	18,434	22,995	5,795	25,967	3,655	3,807	11,325	12,152	15,977	5,392	231,237
Shipments	98,141	17,172	24,272	6,761	19,497	2,819	649	11,032	13,804	18,575	1,808	214,530
Average, 1909–1913:												
Receipts	112,873	13,978	17,320	5,983	21,439	3,509	3,131	7,298	10,252	......	......	206,644
Shipments	89,342	13,570	15,818	6,001	15,491	3,278	432	6,440	11,666	......	......	171,582
1914–15:												
Receipts	143,813	29,962	23,042	9,005	21,419	6,066	4,028	7,338	11,189	13,648	5,828	275,338
Shipments	130,938	31,179	23,147	8,325	16,240	5,089	1,123	6,107	11,726	13,916	4,349	252,139
1915–16:												
Receipts	151,168	35,252	45,778	4,844	17,518	4,707	5,173	4,882	11,364	11,421	13,797	305,904
Shipments	122,280	34,389	45,024	4,528	11,636	3,501	2,292	2,582	11,838	10,961	8,677	257,708
1916–17:												
Receipts	145,075	32,707	31,322	3,184	24,616	4,926	3,911	10,059	13,562	18,216	14,895	302,473
Shipments	108,152	28,649	23,075	3,493	18,940	2,642	934	10,130	11,049	17,392	10,891	235,347
1917–18:												
Receipts	134,310	31,766	42,017	766	37,431	5,303	3,677	18,344	20,170	23,673	19,822	337,279
Shipments	86,725	20,128	42,181	680	32,129	3,194	607	12,826	17,541	21,945	13,705	251,661
1918–19:												
Receipts	115,714	34,727	37,031	2,663	30,812	9,010	8,179	16,688	8,535	20,661	14,820	298,840
Shipments	83,719	30,548	33,019	2,378	23,836	8,820	1,756	11,343	8,212	20,559	4,516	228,706
1919–20:												
Receipts	82,141	26,572	17,054	1,035	31,391	3,221	2,418	7,615	10,636	13,018	13,969	209,070
Shipments	60,792	17,766	19,033	1,084	22,772	1,601	551	5,180	13,096	12,110	4,023	158,008
1920–21:												
Receipts	79,430	19,065	26,003	6,241	30,103	5,848	3,345	7,137	9,176	10,223	16,509	213,080
Shipments	54,598	13,297	14,600	455	21,387	2,339	750	5,132	7,906	8,423	6,099	134,986
Average, 1914–1920:												
Receipts	121,665	30,007	31,750	3,963	27,613	5,569	4,390	10,295	12,090	15,837	14,234	277,426
Shipments	92,458	25,137	28,583	2,992	20,991	3,884	1,145	7,614	11,624	15,044	7,466	216,951
1921–22:												
Receipts	77,828	23,241	32,307	6,065	25,949	4,604	2,285	7,262	14,210	10,665	13,052	217,468
Shipments	63,418	17,869	28,260	10,129	20,160	2,348	330	5,043	12,254	9,768	6,247	175,826
MONTH												
1921–22												
August:												
Receipts	17,321	4,315	7,230	1,222	2,690	1,996	332	1,840	1,812	1,458	2,856	43,072
Shipments	6,505	2,304	1,980	524	2,103	556	66	245	682	570	1,159	16,696
September:												
Receipts	5,886	1,662	3,936	725	2,329	320	184	885	998	1,002	825	18,752
Shipments	5,047	2,017	1,597	1,735	1,639	218	10	240	976	792	714	14,985
October:												
Receipts	5,406	2,537	4,362	515	2,374	190	186	608	1,121	840	1,240	19,379
Shipments	3,725	1,803	1,646	275	1,750	194	8	602	1,023	692	640	12,358
November:												
Receipts	4,087	1,566	2,478	207	1,288	136	245	441	1,120	518	1,158	13,244
Shipments	4,074	1,412	1,984	470	1,012	141	8	502	965	526	598	11,692
December:												
Receipts	4,107	1,201	2,087	312	1,472	141	188	289	913	440	774	11,924
Shipments	3,939	748	1,787	147	991	110	24	431	851	290	358	9,676

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[1] Compiled from Chicago Daily Trade Bulletin.

[2] No report.

OATS—Continued.

TABLE 22.—*Oats: Monthly and yearly receipts and shipments, 11 primary markets, 1909–10 to 1921–22*—Continued.

(In thousands of bushels; i.e., 000 omitted.)

	Chicago	Milwaukee	Minneapolis	Duluth	St. Louis	Toledo	Detroit	Kansas City	Peoria	Omaha	Indianapolis	Total
MONTH												
1921–22												
January:												
Receipts	5,035	1,686	1,658	424	2,214	197	221	378	1,172	924	966	14,875
Shipments	4,168	738	1,725	......	1,561	35	50	307	857	964	424	10,829
February:												
Receipts	6,798	2,190	2,100	218	2,570	249	195	792	1,099	890	980	18,081
Shipments	4,423	1,005	1,899	62	1,771	100	18	395	1,055	786	360	11,874
March:												
Receipts	6,269	2,045	2,362	206	2,332	227	148	467	1,151	744	1,066	17,017
Shipments	6,635	2,031	3,284	26	2,098	216	38	694	1,321	946	476	17,765
April:												
Receipts	3,568	707	1,029	2	1,242	146	110	247	678	549	558	8,836
Shipments	3,208	1,311	2,407	2	1,281	118	48	355	916	758	418	10,822
May:												
Receipts	7,847	2,605	2,196	896	2,846	569	144	474	1,729	1,232	1,155	21,693
Shipments	9,652	2,158	4,874	3,170	2,283	384	38	702	1,575	1,390	438	26,664
June:												
Receipts	5,571	1,329	1,513	979	2,434	148	148	453	1,309	936	830	15,650
Shipments	6,831	1,242	2,664	3,482	2,016	201	4	328	1,035	1,042	354	19,199
July:												
Receipts	5,933	1,398	1,356	359	2,158	285	184	388	1,108	1,132	644	14,945
Shipments	5,211	1,100	2,413	236	1,655	75	18	242	998	1,012	308	13,268

WHEAT.

TABLE 23.—*Wheat: Acreage, production, and total farm value, by States, 1920–1922.*

State	Thousands of acres			Production (thousands of bushels)			Total value, basis Dec. 1 price (thousands of dollars)		
	1920	1921	1922 [1]	1920	1921	1922 [1]	1920	1921	1922 [1]
Maine	13	11	11	286	187	275	658	327	468
Vermont	11	9	9	209	126	189	418	158	274
New York	467	475	466	10,203	9,137	9,014	17,856	9,868	10,636
New Jersey	74	81	77	1,184	1,539	1,540	2,427	1,739	1,694
Pennsylvania	1,368	1,365	1,378	22,700	23,850	25,444	38,590	24,566	27,988
Delaware	116	113	109	1,972	1,300	1,766	3,372	1,274	1,907
Maryland	598	590	578	10,166	8,260	9,537	16,774	8,508	10,681
Virginia	892	847	830	11,150	8,301	10,375	20,070	9,629	12,658
West Virginia	253	250	240	3,162	3,125	2,760	6,008	3,656	3,367
North Carolina	680	600	612	7,956	4,500	5,508	16,708	6,480	7,491
South Carolina	107	118	165	1,177	1,298	1,320	3,001	2,700	2,072
Georgia	124	138	190	1,240	1,449	1,520	2,976	2,536	2,280
Ohio	2,395	2,434	2,544	30,430	30,185	35,644	50,209	32,600	41,703
Indiana	2,080	2,016	2,056	24,960	24,192	29,798	41,683	25,644	33,373
Illinois	2,990	2,909	3,196	45,492	46,822	55,432	73,242	46,822	59,312
Michigan	1,008	945	1,023	15,383	14,840	14,326	25,844	15,433	16,475
Wisconsin	341	214	176	5,152	2,812	3,006	7,934	2,727	3,096
Minnesota	2,880	2,371	1,939	28,168	22,938	27,036	36,618	22,249	27,306
Iowa	613	555	757	10,732	9,944	16,867	15,024	8,751	16,699
Missouri	3,012	3,206	3,105	37,653	34,952	38,818	60,245	34,602	40,759
North Dakota	8,916	9,500	8,740	80,244	80,750	123,234	104,317	68,638	110,911
South Dakota	2,930	2,845	2,989	26,920	25,980	40,012	30,958	22,603	36,811
Nebraska	3,593	3,967	4,177	60,480	59,875	59,838	79,229	49,696	57,445
Kansas	9,294	10,554	9,756	143,078	128,695	122,887	186,002	119,687	120,429
Kentucky	588	634	650	5,998	6,340	7,475	11,456	7,291	8,820
Tennessee	424	450	472	4,028	4,500	4,484	7,855	5,400	5,515
Alabama	20	20	23	192	210	218	442	321	349
Mississippi	10	6	5	100	84	60	213	109	87
Texas	1,583	2,081	1,249	20,579	20,810	9,992	35,396	20,810	10,991
Oklahoma	3,380	3,786	3,300	54,080	47,325	31,350	73,008	40,700	30,723
Arkansas	126	103	86	1,197	958	1,118	2,274	958	1,185
Montana	2,787	2,715	2,699	28,690	33,430	40,370	36,724	28,416	35,929
Wyoming	196	193	180	3,920	3,316	3,060	5,292	2,620	2,509
Colorado	1,405	1,719	1,620	25,273	23,239	21,776	34,118	17,662	19,380
New Mexico	195	227	105	3,566	3,088	885	4,993	3,242	1,062
Arizona	36	40	49	864	840	1,274	2,264	1,050	1,465
Utah	273	276	294	5,331	6,299	5,682	8,156	4,725	5,113
Nevada	19	21	21	424	493	550	763	641	660
Idaho	1,100	1,123	1,123	24,600	26,952	24,275	30,750	19,405	21,847
Washington	2,459	2,550	2,426	41,665	58,245	32,444	56,248	50,091	33,742
Oregon	1,073	1,082	1,093	22,427	25,364	19,744	29,155	21,560	21,323
California	714	557	712	9,996	8,355	15,308	17,993	8,940	17,604
United States	61,143	63,696	61,230	833,027	814,905	856,211	1,197,263	754,834	864,139

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[1] Preliminary estimate.

WHEAT—Continued.

TABLE 24.—*Wheat: Area and production in undermentioned countries.*[1]

Country	Area				Production			
	Average, 1909-1913	1920	1921	1922 [2]	Average, 1909-1913	1920	1921	1922 [2]
NORTHERN HEMISPHERE								
NORTH AMERICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Canada [3]	9,945	18,232	23,261	22,631	197,119	263,189	300,858	388,773
United States [3]	47,097	61,143	62,408	56,770	690,108	833,027	794,893	810,123
Mexico	[4] 2,628	....	....	....	9,995	....	[5] 5,089	5,190
Total North American countries marked [3]	57,042	79,375	85,669	79,401	887,227	1,096,216	1,095,751	1,198,896
EUROPE								
United Kingdom:								
England and Wales [3]	1,792	1,875	1,976	1,969	57,528	53,352	69,776	60,800
Scotland	52	54	65	65	2,345	2,080	2,568	....
Ireland	43	50	43	....	1,608	1,400	1,448	....
Norway	12	40	41	....	307	999	972	[5] 760
Sweden [3]	255	360	360	360	7,907	10,528	12,677	8,473
Denmark [3]	[6] 123	180	220	237	4,916	7,390	11,145	8,466
Netherlands [3]	138	152	180	156	4,976	5,993	8,562	5,210
Belgium [3]	[7] 395	306	343	299	14,585	10,274	14,495	9,870
Luxemburg	27	27	27	....	615	449	661	[5] 520
France [3]	[8] 16,308	12,585	13,300	12,701	[8] 317,254	236,929	323,467	235,380
Spain [3]	9,547	10,254	10,386	10,281	130,446	138,605	145,150	125,908
Portugal	[6] 1,180	1,098	....	....	8,683	10,376	8,613	[5] 6,000
Italy [3]	[8] 11,746	[8] 11,290	[8] 11,779	11,540	[8] 183,260	[8] 141,337	[9] 194,071	163,629
Switzerland [3]	[6] 156	119	110	103	3,314	3,584	3,576	2,363
Germany [3]	[8] 4,768	3,399	3,561	3,384	[8] 152,119	82,583	107,798	69,655
Austria	[8] 3,011	371	378	....	[8] 61,075	5,424	6,452	7,150
Czechoslovakia	....	1,573	1,556	1,529	....	26,362	38,682	30,472
Hungary [3]	[8] 8,284	2,662	2,697	2,855	[8] 156,523	38,294	52,715	43,945
Yugoslavia [3]	....	3,360	3,699	3,637	....	43,011	51,809	42,250
Serbia [3]	[8] 874	....	....	....	[8] 14,775	....	....	....
Greece [3]	868	1,399	988	890	7,200	12,194	11,170	9,553
Bulgaria [3]	[8] 2,764	2,183	2,361	1,930	[8] 43,725	29,999	31,893	27,925
Rumania [3]	[8] 4,576	5,026	6,149	6,548	[8] 86,679	62,571	77,119	87,820
Poland [3]	[8] 1,260	1,790	2,093	2,563	[8] 23,343	22,740	37,409	42,274
Lithuania	....	....	179	....	....	....	2,840	....
Latvia	....	....	46	69	....	....	784	948
Esthonia	....	....	....	....	....	....	427	....
Finland	....	19	20	22	129	272	280	296
Russia, including Ukraine and Northern Caucasia	[8] 50,388	....	....	....	[8] 522,794	....	....	....
Total European countries marked [3]	63,854	56,940	60,202	59,453	1,208,550	899,384	1,152,832	943,521
AFRICA								
Morocco	....	1,997	1,469	1,853	....	21,999	17,466	9,553
Algeria [3]	3,371	3,096	2,816	3,103	33,071	6,798	33,764	18,233
Tunis [3]	1,193	1,319	1,500	939	6,063	5,229	10,623	3,307
Egypt [3]	1,311	1,190	1,458	1,518	34,000	31,711	37,011	36,648
Total African countries marked [3]	5,875	5,605	5,774	5,560	73,134	43,738	81,398	58,188

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[1] Sources: Official sources unless otherwise stated.
[2] Figures for 1922 and 1921-22 compiled from reports received up to November 1, 1922.
[3] Indicates countries reporting for all periods given either as listed or as part of some other country.
[4] 1 year only.
[5] Unofficial.
[6] 3-year average.
[7] 4-year average.
[8] Old boundaries.
[9] Includes 1,235,000 bushels in the new territory of Venezia Tridentina and Venezia Giulia.

WHEAT—Continued.

TABLE 24.—*Wheat: Area and production in undermentioned countries*[1]—Continued.

Country	Area				Production			
	Average, 1909-1913	1920	1921	1922[2]	Average, 1909-1913	1920	1921	1922[2]
ASIA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Turkey					35,000			
Cyprus			198		2,286		2,425	[3] [4] 2,400
Persia					16,000	[3] 8,000	[3] 8,000	[3] 12,000
India[5]	29,043				349,919			
British India[5]		23,373	20,240	22,237		318,565	210,149	308,187
Native States[5]		6,576	5,543	5,997		59,323	40,208	58,165
Russia (Asiatic)	9,764				84,139			
Japanese Empire:								
Japan	1,179	1,300	1,264		25,274	30,026	26,921	26,495
Chosen	369				4,871		10,705	
Formosa	14				173			
Total Asiatic countries marked[5]	29,043	29,949	25,783	28,234	349,919	377,888	250,357	366,352
Total Northern Hemisphere countries marked[3], [5]	155,814	171,869	177,428	172,648	2,518,830	2,417,226	2,580,338	2,566,957
Country	Average, 1908–9 to 1912–13	1919–20	1920–21	1921–22	Average, 1908–9 to 1912–13	1919–20	1920–21	1921–22
SOUTHERN HEMISPHERE	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Peru		203	203			2,627	2,645	[3] 2,800
Chile[5]	1,021	1,196	1,314	1,296	20,316	19,916	23,190	22,179
Uruguay[5]	[6] 734	680	700	812	[6] 7,314	5,948	7,768	9,944
Argentina[5]	15,799	14,957	14,816	13,927	157,347	214,140	169,754	180,641
Union of South Africa[5]	[7] 751	800	823	839	4,620	6,630	8,113	8,689
Australia[5]	6,798	6,419	9,072	9,587	84,943	45,976	145,874	132,282
New Zealand[5]	258	140	220	353	7,885	4,560	6,872	10,565
Total Southern Hemisphere countries marked[5]	25,361	24,192	26,945	26,814	282,425	297,170	361,571	364,300
World total countries marked[3], [5]	181,175	196,061	204,373	199,462	2,801,255	2,714,396	2,941,909	2,931,257
World total all countries reporting	249,842	202,793	209,862	203,000	3,576,549	2,824,410	3,078,887	3,035,841

[1] Official sources unless otherwise stated.

[2] Figures for 1922 and 1921–22 compiled from reports received up to November 1, 1922.

[3] Unofficial.

[4] Cyprus and Malta.

[5] Indicates countries reporting for all periods either as listed or as part of some other country.

[6] 4-year average.

[7] 3-year average.

TABLE 25.—*Wheat: World production so far as reported, 1891–1922.*

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		*Bushels*		*Bushels*		*Bushels*
1891	2,432,322,000	1899	2,783,885,000	1907	3,133,965,000	1915	4,198,782,000
1892	2,481,805,000	1900	2,610,751,000	1908	3,182,105,000	1916	[1] 2,608,545,000
1893	2,559,174,000	1901	2,955,975,000	1909	3,581,519,000	1917	[1] 2,287,889,000
1894	2,660,557,000	1902	3,090,116,000	1910	3,575,055,000	1918	[1] 2,803,616,000
1895	2,593,312,000	1903	3,189,813,000	1911	3,551,795,000	1919	[1] 2,742,339,000
1896	2,506,320,000	1904	3,163,542,000	1912	3,791,951,000	1920	[1] 2,824,410,000
1897	2,236,268,000	1905	3,327,084,000	1913	4,127,437,000	1921	[1] 3,078,887,000
1898	2,948,305,000	1906	3,434,354,000	1914	3,585,916,000	1922	[1] 3,035,841,000

[1] Russia not included In 1915 Russia produced 18 per cent of the reported world production.

WHEAT—Continued.

TABLE 26.—*Wheat: Yield per acre in 29 foreign countries, 1899 to 1921.*[1]

Year	Algeria	Argentina	Australia	Austria	Belgium	British India	Bulgaria	Canada	Chile	Czechoslovakia	Denmark	Egypt	France	Germany	Greece
	Bushels	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*
1899	6.9	13.3	7.8	19.0	....	10.9	10.6	17.4	....	....	42.7	....	21.3	28.4	....
1900	10.3	12.7	7.3	15.6	33.0	10.7	....	13.1	....	....	42.0	....	19.2	27.9	....
1901	9.9	9.0	8.8	16.7	34.5	11.1	....	25.2	....	....	30.6	....	18.5	23.5	....
1902	9.9	6.9	7.8	19.0	34.9	9.7	....	25.3	....	....	44.9	....	20.2	30.3	....
1903	9.7	11.4	2.5	17.7	34.8	12.7	17.8	17.2	....	....	44.2	....	22.7	29.3	....
1904	7.8	12.1	13.7	19.5	35.1	12.7	18.7	16.6	....	....	42.4	....	18.6	29.5	....
1905	7.5	12.4	9.0	19.6	30.8	9.9	14.4	21.7	....	....	40.3	....	20.8	28.5	....
1906	10.4	9.6	11.5	20.3	34.9	12.1	15.7	20.3	....	....	41.2	....	20.4	30.3	....
1907	9.6	11.1	11.5	18.3	40.3	10.9	9.7	15.3	....	....	43.0	....	23.5	29.6	....
1908	8.7	13.5	8.6	21.0	35.4	10.0	15.1	17.0	16.6	....	....	24.7	19.5	29.7	....
Average, 1899–1908	9.1	11.3	9.0	18.7	34.8	11.1	....	18.9	....	....	....	....	20.5	28.8	....
1909	10.6	10.4	12.3	19.9	37.4	10.9	12.5	21.5	16.1	....	....	25.0	22.0	30.5	....
1910	10.4	9.1	14.2	19.2	31.2	12.8	15.7	16.1	23.4	....	....	25.6	15.6	29.6	....
1911	11.5	10.1	13.3	19.6	39.5	12.3	17.5	20.8	18.8	....	44.7	28.1	20.3	30.6	....
1912	7.5	10.6	9.9	22.4	38.7	11.9	15.5	20.4	20.5	....	44.0	23.5	20.6	33.7	....
1913	10.5	11.3	12.9	19.9	37.4	12.2	17.9	21.0	21.4	....	49.9	28.4	19.8	35.1	....
Average, 1909–1913	10.1	10.3	12.5	20.2	36.9	12.0	15.8	20.0	19.9	....	....	26.1	19.7	31.9	....
1914	9.2	7.0	11.5	22.9	34.9	11.0	9.8	15.7	16.1	26.3	43.2	25.7	18.9	29.6	8.3
1915	10.8	10.9	2.7	....	....	11.6	15.3	26.0	17.7	19.0	48.6	25.1	20.1	28.6	....
1916	8.9	11.2	14.8	....	....	10.7	12.5	17.1	17.7	15.9	39.7	25.7	16.5	27.9	....
1917	7.2	5.0	13.6	14.6	....	11.5	13.4	15.8	17.7	12.2	32.8	27.2	13.0	22.9	11.0
1918	15.6	10.3	12.1	12.9	....	10.4	10.4	10.9	17.8	12.9	45.2	25.5	20.5	25.4	12.6
1919	9.1	10.1	9.5	13.8	28.8	11.8	16.4	10.1	16.4	18.2	46.3	22.8	16.1	24.8	10.4
1920	3.2	14.3	7.2	14.7	33.6	12.6	18.6	14.4	....	16.8	41.1	26.6	18.8	24.3	8.7
Average, 1914–1920	9.3	9.8	10.6	....	....	11.3	13.6	15.4	....	17.3	42.5	25.5	17.8	26.6	....
1921	14.7	11.5	16.0	17.1	32.6	9.7	18.0	12.9	21.9	26.4	50.9	25.4	24.5	27.5	11.3

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[1] Compiled from United States Department of Agriculture office data. Data not available in cases of omission.

Year	Italy	Japan	Netherlands	New Zealand	Norway	Poland (Russian)	Rumania	Russia proper	Russian Empire	Spain	Sweden	Switzerland	United Kingdom	Uruguay
	Bushels	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*
1899	....	18.6	28.6	33.7	....	16.5	6.3	8.3	9.1	10.8	24.5	....	33.8	....
1900	....	19.0	29.6	32.8	....	15.0	14.4	8.0	8.1	11.4	28.0	....	29.5	8.5
1901	15.2	18.8	31.3	32.4	....	11.6	17.9	7.6	7.9	14.9	21.5	....	31.9	5.4
1902	12.8	17.1	33.6	25.0	....	15.6	20.8	10.9	11.0	14.6	23.5	....	33.9	10.5
1903	17.0	8.3	31.1	39.5	....	14.9	18.6	10.4	10.9	14.4	27.6	....	31.0	8.0
1904	13.9	17.6	33.0	35.2	....	17.1	12.6	11.4	11.3	10.6	25.7	....	27.8	....
1905	13.5	16.6	32.1	36.3	....	16.6	21.4	9.4	10.2	10.4	26.8	....	33.5	11.7
1906	15.3	18.7	35.3	31.3	....	16.8	22.8	7.0	8.0	15.1	31.4	....	34.8	6.5
1907	15.1	21.0	39.7	25.4	24.2	14.6	10.0	7.5	8.5	11.0	28.9	....	35.0	11.0
1908	....	20.5	36.8	29.8	....	17.4	12.3	8.4	9.3	12.9	30.8	....	33.4	12.1
Average, 1899–1908	....	17.6	32.9	32.6	....	15.6	15.7	8.9	9.4	12.6	26.9	....	32.6	....
1909	16.4	20.8	32.7	35.9	26.1	17.3	13.6	12.5	11.8	15.4	32.7	....	34.9	12.6
1910	13.0	20.2	32.9	29.0	24.5	18.1	23.0	10.6	10.8	14.6	31.3	....	31.4	....
1911	16.4	21.0	38.8	26.6	22.6	19.2	19.7	6.6	7.0	15.3	32.3	34.6	32.5	9.4
1912	14.1	21.8	39.2	34.7	27.7	19.7	17.4	9.5	10.3	11.4	....	31.2	30.0	11.0
1913	18.3	22.6	36.6	28.1	27.0	18.3	20.8	13.0	12.4	11.7	32.8	34.8	32.7	6.7
Average, 1909–1913	15.6	21.3	36.1	30.6	25.6	18.5	18.9	10.4	10.4	13.7	....	....	32.3	....
1914	14.4	19.6	39.0	32.3	22.5	....	8.9	....	9.9	12.0	30.9	31.8	33.8	6.5
1915	13.6	21.8	43.5	29.8	23.8	....	19.1	....	....	13.9	30.7	34.7	32.7	4.6
1916	15.1	23.1	35.7	22.3	22.6	....	16.2	....	....	15.0	28.4	30.8	30.0	10.4
1917	13.3	24.9	32.7	23.9	21.6	....	....	....	....	....	21.1	32.8	31.6	6.9
1918	17.0	23.7	36.7	25.0	26.6	....	3.3	....	....	13.3	23.5	38.9	34.4	13.4
1919	16.0	24.2	35.8	31.6	26.1	20.8	15.5	....	....	12.5	27.3	27.1	29.2	8.2
1920	12.5	21.8	37.9	32.6	25.0	12.7	14.1	....	....	13.5	29.0	30.1	28.7	8.7
Average, 1914–1920	14.5	22.8	37.5	27.3	24.5	....	....	....	....	....	27.2	32.3	31.6	8.9
1921	16.0	21.2	49.4	31.2	23.5	17.1	13.0	....	....	13.8	34.9	30.5	35.4	11.1

[1] Compiled from United States Department of Agriculture office data. Data not available in cases of omission.

WHEAT—Continued.

TABLE 27.—*Wheat: Acreage, production, value, exports, etc., in the United States, 1849–1922.*

[See headnote of Table 4]

Year	Acreage harvested	Average yield per acre	Production	Average farm price per bushel Dec. 1	Farm value Dec. 1	Chicago cash price per bushel, No. 1 northern spring				Domestic exports, including flour, fiscal year beginning July 1	Imports, including flour, fiscal year beginning July 1	Per cent of crop exported
						December		Following May				
						Low.	High.	Low.	High.			
	1,000 acres	*Bush.*	*1,000 bushels*	*Cents*	*1,000 dollars*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Bushels*	*Bushels*	*P. ct.*
1849......	....	......	*100,486*	....	....	....	....	....	....	7,535,901	....	7.5
1859......	....	......	*173,105*	....	....	....	....	....	....	17,213,133	1,565,791	9.9
1866–1875.	20,470	12,0	244,672	105.3	257,587	95	105	110	125	50,534,641	1,749,128	20.7
1876–1885.	34,433	12.4	425,054	92.6	391,104	97	104	101	114	127,468,781	711,806	30.0
1886–1895.	37,500	12.7	476,788	67.3	321,071	74	80	75	86	143,076,110	992,754	30.0
1896......	43,916	12.4	544,193	71.7	390,346	74⅝	93⅛	68¾	97⅞	145,124,972	1,544,242	26.7
1897......	46,046	13.3	610,254	80.9	493,683	92	109	117	185	217,306,005	2,058,938	35.6
1898......	51,007	15.1	772,163	58.2	449,022	62¾	70	68⅜	79½	222,618,420	1,875,173	28.8
1899......	*52,589*	12.1	636,051	58.6	372,982	64	69½	63⅝	67½	186,096,762	320,194	29.3
1900......	51,387	11.7	602,708	62.0	373,578	69¼	74⅝	70	75⅛	215,990,073	603,101	35.8
1901......	52,473	15.0	788,638	62.6	493,766	73	79½	72⅜	76¼	234,772,516	120,502	29.8
1902......	49,649	14.6	724,808	63.0	456,851	71⅞	77¾	74¾	80⅝	202,905,598	1,080,128	28.0
1903......	51,632	12.9	663,923	69.5	461,439	77¾	87	87¾	101½	120,727,613	217,682	18.2
1904......	47,825	12.5	596,911	92.4	551,788	115	122	89½	113¾	44,112,910	3,286,189	7.4
1905......	49,389	14.7	726,819	74.6	542,543	82½	90	80½	87¼	97,609,007	261,908	13.4
1906......	47,800	15.8	756,775	66.2	501,316	....	....	84	106	146,700,425	590,092	19.4
1907......	45,116	14.1	637,981	86.5	552,074	....	....	....	....	163,043,669	519,785	25.6
1908......	45,970	14.0	644,656	92.2	594,128	106½	112	126½	137	114,268,468	456,940	17.7
1909......	*44,262*	15.8	700,434	98.4	689,108	106	119¾	100	119¼	87,364,318	815,617	12.5
1910[1].....	45,681	13.9	635,121	88.3	561,051	104	110	98	106	69,311,760	1,146,558	10.9
1911......	49,543	12.5	621,338	87.4	543,063	105	110	115	122	79,689,404	3,413,626	12.8
1912......	45,814	15.9	730,267	76.0	555,280	85	90¾	90½	96	142,879,596	1,282,039	19.6
1913......	50,184	15.2	763,380	79.9	610,122	89½	93	96	100	145,590,349	2,383,537	19.1
1914......	53,541	16.6	891,017	98.6	878,680	115	131	141	164½	332,464,975	715,369	37.3
1915......	60,469	17.0	1,025,801	91.9	942,303	106	128½	116	126	243,117,026	7,187,650	23.7
1916......	52,316	12.2	636,318	160.3	1,019,968	155½	190	258	340	203,573,928	24,924,985	32.0
1917......	45,089	14.1	636,655	200.8	1,278,112	220	220	220	220	132,578,633	31,215,213	20.8
1918......	59,181	15.6	921,438	204.2	1,881,826	220	220	245	280	287,401,579	11,288,591	31.2
1919......	75,694	12.8	967,979	214.9	2,080,056	280	325	295	345	219,864,548	5,495,516	22.7
1920[1].....	61,143	13.6	833,027	143.7	1,197,263	164	187	142	178	366,077,439	57,398,002	43.9
1921......	63,696	12.8	814,905	92.6	754,834	118½	138	127	173	279,406,777	17,251,481	34.3
1922[2].....	61,230	14.0	856,211	100.9	864,139	121	139¾	....	....	....	....	......

[1] Acreage adjusted to census basis.

[2] Preliminary estimate.

WHEAT—Continued.

TABLE 28.—*Wheat: Yield per acre, price per bushel December 1, and value per acre, by States.*

State	Yield per acre (bushels)						Farm price per bushel (cents)											Value per acre[1] (dollars)	
	5-year average, 1918-1922	1918	1919	1920	1921	1922	10-year average, 1913-1922	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	5-year average, 1917-1921	1922
Me.....	21.0	22.0	18.8	22.0	17.0	25.0	178	101	109	112	187	235	237	220	230	175	170	41.35	42.50
Vt.....	18.4	22.0	16.0	19.0	14.0	21.0	164	100	100	107	165	236	231	227	200	125	145	37.97	30.45
N. Y...	19.9	18.2	21.0	21.8	19.2	19.3	151	93	108	101	168	210	215	215	175	108	118	37.45	22.77
N. J....	18.0	17.0	18.0	16.0	19.0	20.0	155	96	109	106	164	213	215	220	205	113	110	34.18	22.00
Pa.....	17.4	17.0	17.5	16.6	17.5	18.5	148	91	104	104	162	205	214	216	170	103	110	31.26	20.35
Del....	13.9	13.0	12.0	17.0	11.5	16.2	149	88	109	109	162	208	222	213	171	98	108	25.82	17.50
Md....	15.3	15.5	13.5	17.0	14.0	16.5	149	89	106	105	171	207	219	215	165	103	112	28.12	18.48
Va.....	11.7	12.0	11.8	12.5	9.8	12.5	155	96	108	108	165	216	219	224	180	116	122	22.93	15.25
W. Va..	12.8	14.2	13.5	12.5	12.5	11.5	156	100	108	108	160	217	221	220	190	117	122	25.97	14.03
N. C.	8.6	7.0	7.9	11.7	7.5	9.0	171	106	117	120	176	234	230	233	210	144	136	18.66	12.24
S. C....	10.2	11.0	10.0	11.0	11.0	8.0	203	130	145	138	189	290	260	258	255	208	157	27.16	12.56
Ga.....	9.8	10.2	10.5	10.0	10.5	8.0	195	120	134	129	186	290	266	263	240	175	150	24.36	12.00
Ohio...	15.6	19.0	19.9	12.7	12.4	14.0	149	90	105	104	169	204	212	212	165	108	117	32.34	16.38
Ind....	14.9	21.0	14.9	12.0	12.0	14.5	147	88	103	102	169	203	208	210	165	106	112	29.06	16.24
Ill.....	17.6	22.1	17.1	15.2	16.1	17.3	144	86	101	100	165	201	208	210	161	100	107	32.01	18.51
Mich...	15.7	14.2	19.4	15.3	15.7	14.0	147	89	103	101	167	204	209	210	168	104	115	29.83	16.10
Wis....	16.6	24.2	13.5	15.1	13.1	17.1	141	82	100	95	169	202	205	215	154	97	103	31.93	17.61
Minn...	12.7	20.9	9.4	9.8	9.7	13.9	141	76	102	90	162	202	204	250	130	97	101	24.73	14.04
Iowa...	18.3	18.9	14.8	17.5	17.9	22.3	134	76	96	87	156	199	200	200	140	88	99	29.45	22.08
Mo....	13.3	17.2	13.5	12.5	10.9	12.5	142	84	98	98	165	195	205	209	160	99	105	24.82	13.12
N. Dak.	10.4	13.6	6.9	9.0	8.5	14.1	136	73	101	87	152	200	203	241	130	85	90	15.83	12.69
S. Dak.	11.8	19.0	8.2	9.2	9.1	13.4	133	71	94	86	150	196	199	240	115	87	92	20.69	12.33
Nebr...	14.2	11.2	13.8	16.8	15.1	14.3	131	71	95	84	160	195	197	202	131	83	96	22.28	13.73
Kans...	13.6	14.1	13.8	15.4	12.2	12.6	136	79	95	89	164	198	199	215	130	93	98	22.65	12.35
Ky.....	11.2	13.0	11.5	10.2	10.0	11.5	153	96	103	105	166	212	214	211	191	115	118	21.70	13.57
Tenn...	9.7	10.0	9.3	9.5	10.0	9.5	158	98	105	108	169	222	214	222	195	120	123	18.60	11.68
Ala....	9.5	9.0	9.0	9.6	10.5	9.5	185	115	126	125	185	270	245	245	230	153	160	21.85	15.20
Miss...	13.3	16.5	14.0	10.0	14.0	12.0	179	95	125	105	175	300	250	250	213	130	145	32.15	17.40
Tex....	11.5	10.0	16.5	13.0	10.0	8.0	148	94	99	107	173	210	215	200	172	100	110	22.41	8.80
Okla...	12.9	12.6	14.0	16.0	12.5	9.5	135	82	92	89	167	194	210	205	135	86	98	21.74	9.31
Ark....	10.7	12.0	9.5	9.5	9.3	13.0	146	90	99	101	163	201	207	202	190	100	106	20.71	13.78
Mont...	10.6	12.6	2.7	10.3	12.3	15.0	132	66	91	78	161	192	194	235	128	85	89	14.88	13.35
Wyo...	18.8	25.4	14.4	20.0	17.2	17.0	128	72	89	78	145	200	189	212	135	79	82	32.31	13.94
Colo...	14.2	12.3	13.7	18.0	13.5	13.4	128	78	87	80	150	193	195	202	135	76	89	25.97	11.93
N. Mex.	15.2	16.7	19.0	18.3	13.6	8.4	142	97	90	90	150	215	210	200	140	105	120	28.05	10.08
Ariz....	24.4	26.0	25.0	24.0	21.0	26.0	168	110	125	115	150	210	240	225	262	125	115	52.06	29.90
Utah...	19.4	20.2	15.4	19.5	22.8	19.3	129	73	86	86	152	178	188	210	153	75	90	30.25	17.37
Nev....	23.7	25.5	21.2	22.3	23.5	26.2	144	82	95	95	140	180	206	214	180	130	120	43.73	31.44
Idaho..	21.5	21.3	18.2	22.4	24.0	21.6	124	63	87	80	146	182	192	205	125	72	90	32.09	19.44
Wash...	16.6	13.1	16.8	16.9	22.8	13.4	133	73	100	82	143	193	196	214	135	86	104	26.91	13.94
Oreg...	19.3	14.7	19.2	20.9	23.4	18.1	132	75	102	84	145	182	201	212	130	85	108	28.74	19.55
Calif...	16.2	15.0	15.5	14.0	15.0	21.5	147	95	104	95	152	200	216	204	180	107	115	28.97	24.72
U. S..	13.8	15.6	12.8	13.6	12.8	14.0	138.8	79.9	98.6	91.9	160.3	200.8	204.2	214.9	143.7	92.6	100.9	23.81	14.11

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[1] Based upon farm price Dec. 1.

WHEAT—Continued.

TABLE 29.—*Wheat: Production and distribution in the United States, 1897–1922.*

Year	Stocks in mills and elevators July 1	Old stock on farms July 1	Crop			Total supplies[1]	Stock on farms Mar. 1 following	Stocks in mills and elevators Mar. 1	Shipped out of county where grown
			Quantity	Weight per bushel	Quality				
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*Pounds*	*Per cent*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
1897–1901	....	42,960	681,963	57.2	87.0	724,923	175,055	....	365,058
1902–1906	....	42,048	693,847	57.2	....	735,895	159,665	....	396,532
1907	....	55,438	637,981	58.2	89.9	693,419	148,392	....	377,999
1908	....	33,188	644,656	58.3	89.4	677,844	137,628	....	392,440
1909	....	14,171	700,434	57.9	90.4	714,605	163,371	....	428,262
1910	....	36,725	635,121	58.5	93.1	671,846	162,705	98,597	352,906
1911	....	34,071	621,338	57.8	88.3	655,409	122,041	95,710	348,739
1912	....	23,876	730,267	58.3	90.0	754,143	156,471	118,400	449,881
1913	....	35,515	763,380	58.7	93.2	798,895	151,795	93,627	411,733
1914	....	32,236	891,017	58.0	89.7	923,253	152,903	85,955	541,198
1915	....	28,972	1,025,801	57.9	88.4	1,054,773	244,448	155,027	633,380
1916	....	74,731	636,318	57.1	87.0	711,049	100,650	89,173	361,088
1917	....	15,611	636,655	58.5	92.4	652,166	107,745	66,138	325,500
1918	....	8,063	921,438	58.8	93.1	929,501	128,703	107,037	541,666
1919	19,672	19,261	967,979	56.3	82.1	987,240	169,904	123,233	591,552
1920	37,304	49,546	833,027	57.4	88.9	882,573	217,037	87,075	491,035
1921	26,767	56,707	814,905	56.6	85.8	871,612	124,253	75,071	502,470
1922[2]	27,830	32,359	856,211	57.7	87.6	888,570	153,134	91,546	574,452

[1] Crop and carry-over on farms only. [2] Preliminary estimate.

TABLE 30.—*Wheat: Monthly and yearly average price per bushel of reported sales, 1909–10 to 1921–22.*

NO. 2 RED WINTER, CHICAGO[1]

Crop year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Weighted average
1909–10	$1.10	$1.04	$1.07	$1.20	$1.18	$1.25	$1.26	$1.23	$1.18	$1.11	$1.11	$1.01	$1.10
1910–11	1.07	1.02	.99	.96	.93	.94	.98	.91	.90	.90	.96	.91	1.02
1911–12	.86	.90	.93	1.00	.96	.96	.97	1.01	1.03	1.09	1.16	1.10	.90
1912–13	1.05	1.03	1.03	1.06	.99	.86	1.09	.99	.95	1.02	1.03	1.00	1.03
1913–14	.87	.88	.93	.92	.92	.94	.97	.97	.95	.95	.99	.82	.88
Av., 1909–1913	.99	.97	.99	1.03	1.00	.99	1.05	1.02	1.00	1.01	1.05	.97	....
1014–15	.82	.92	1.11	1.12	1.15	1.20	1.39	1.57	1.52	1.59	1.55	1.24	1.08
1915–16	1.13	1.11	1.08	1.12	1.12	1.23	1.30	1.23	1.13	1.22	1.15	1.05	1.13
1916–17	1.23	1.43	1.53	1.66	1.85	1.76	1.89	1.74	1.99	2.43	2.94	2.76	1.68
1917–18	2.50	2.30	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.16	2.17	2.25
1918–19	2.22	2.21	2.23	2.25	2.24	2.29	2.34	2.28	2.36	2.52	2.76	2.32	2.22
1919–20	2.23	2.24	2.24	2.24	2.29	2.44	2.64	2.42	[2]2.55	2.63	3.10	2.89	2.24
1920–21	2.59	2.50	2.53	2.20	2.01	2.02	1.94	1.85	1.65	1.41	1.67	1.47	2.22
Av., 1914–1920	1.82	1.82	1.84	1.82	1.83	1.87	1.95	1.89	1.91	2.00	2.19	1.99	....
1921–22	1.24	1.22	1.29	1.18	1.23	1.18	1.21	1.34	1.38	1.40	1.34	1.18	1.25

NO. 1 DARK NORTHERN SPRING, MINNEAPOLIS[3]

Crop year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Weighted average
1917–18	......	$2.50	$2.21	$2.21	$2.21	$2.21	$2.21	$2.21	$2.21	$2.21	$2.21	$2.21	$2.23
1918–19	$2.21	2.29	2.24	2.23	2.25	2.25	2.25	2.29	2.41	2.63	2.68	2.56	2.36
1919–20	2.72	2.71	2.77	2.84	3.00	3.25	3.34	2.90	2.97	3.23	3.26	3.01	3.00
1920–21	2.94	2.59	2.65	2.21	1.82	1.72	1.81	1.74	1.72	1.57	1.67	1.74	2.02
Av., 1917–1920	2.62	2.52	2.47	2.37	2.32	2.36	2.40	2.28	2.33	2.41	2.46	2.38	....
1921–22	1.81	1.57	1.56	1.37	1.30	1.33	1.39	1.58	1.50	1.66	1.71	1.53	1.48

[1] Compiled from the Chicago Daily Trade Bulletin.
[2] Based on small number of sales.
[3] Compiled from the Minneapolis Market Board.

WHEAT—Continued.

TABLE 31.—*Wheat: Farm price, cents per bushel on 1st of each month, 1908–1922.*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average[1]
1908	88.7	89.0	89.2	89.8	89.3	92.3	89.5	90.4	88.7	90.4	91.5	92.8	90.3
1909	93.5	95.2	103.9	107.0	115.9	123.5	120.8	107.1	95.2	94.6	99.9	98.6	101.3
1910	103.4	105.0	105.1	104.5	99.9	97.6	95.3	98.9	95.8	93.7	90.5	88.3	96.5
1911	88.6	89.8	85.4	83.8	84.6	86.3	84.3	82.7	84.8	88.4	91.5	87.4	86.9
1912	88.0	90.4	90.7	92.5	99.7	102.8	99.0	89.7	85.8	83.4	83.8	76.0	87.4
1913	76.2	79.9	80.6	79.1	80.9	82.7	81.4	77.1	77.1	77.9	77.0	79.9	78.4
1914	81.0	81.6	83.1	84.2	83.9	84.4	76.9	76.5	93.3	93.5	97.2	98.6	88.4
1915	107.8	129.9	133.6	131.7	139.6	131.5	102.8	106.5	95.0	90.9	93.1	91.9	105.2
1916	102.8	113.9	102.9	98.6	102.5	100.0	93.0	107.1	131.2	136.3	158.4	160.3	125.9
1917	150.3	164.8	164.4	180.0	245.9	248.5	220.1	228.9	209.7	200.6	200.0	200.8	200.8
1918	201.9	201.2	202.7	202.6	203.6	202.5	203.2	204.5	205.6	205.8	206.0	204.2	204.3
1919	204.8	207.5	208.0	214.2	231.1	228.4	222.0	217.2	205.7	209.6	213.2	214.9	212.7
1920	231.8	235.7	226.6	234.0	251.3	258.3	253.6	232.2	218.7	214.3	188.0	143.7	217.2
1921	149.2	149.3	147.2	133.5	110.7	127.4	112.2	104.8	101.2	105.6	94.2	92.6	112.7
1922	93.3	97.0	116.9	117.0	121.0	116.5	102.6	97.1	88.1	90.4	97.8	100.9	98.8
Av., 1913–1922	139.9	146.1	146.6	147.5	157.0	158.0	146.8	145.2	142.6	142.5	142.5	146.4	153.2

[1] Weighted average.

TABLE 32.—*Wheat: Monthly marketings by farmers, 1917–1922.*

Year	Estimated amount sold monthly by farmers of United States (millions of bushels)												
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season
1917–18	41	69	108	101	77	43	26	22	21	23	17	12	560
1918–19	136	154	139	107	67	56	36	24	16	13	15	12	775
1919–20	137	186	125	89	60	45	34	24	23	25	27	25	800
1920–21	82	97	108	72	47	42	38	36	33	34	44	47	680
1921–22	142	136	122	79	51	40	33	36	29	24	26	27	745
Average	108	128	120	90	60	45	33	28	24	24	26	25	711
	Per cent of year's sales												
1917–18	7.4	12.4	19.3	18.0	13.7	7.6	4.7	3.9	3.7	4.1	3.1	2.1	100.0
1918–19	17.6	19.9	18.0	13.8	8.7	7.3	4.6	3.1	2.0	1.6	1.9	1.5	100.0
1919–20	17.1	23.2	15.6	11.1	7.5	5.7	4.2	3.0	2.9	3.1	3.4	3.2	100.0
1920–21	12.1	14.3	15.9	10.6	6.9	6.2	5.5	5.3	4.9	5.0	6.4	6.9	100.0
1921–22	19.1	18.2	16.4	10.6	6.8	5.4	4.4	4.9	3.9	3.2	3.5	3.6	100.0
Average	14.7	17.6	17.0	12.8	8.7	6.4	4.7	4.0	3.5	3.4	3.7	3.5	100.0

TABLE 33.—*Wheat: Monthly and yearly receipts and shipments, 11 primary markets, 1909–10 to 1921–22.*[1]

Year	Chicago	Milwaukee	Minneapolis	Duluth	St. Louis	Toledo	Detroit	Kansas City	Peoria	Omaha	Indianapolis	Total
	1,000 bush.	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*
1909–10:												
Receipts...	27,542	8,482	92,833	54,687	22,064	4,426	1,821	34,092	1,304	(2)	(2)	247,251
Shipments.	20,586	2,757	20,546	50,280	19,622	1,474	167	22,057	1,002	(2)	(2)	138,491
1910–11:												
Receipts...	27,400	10,062	90,774	28,628	20,127	4,122	2,003	40,537	1,225	(2)	(2)	224,878
Shipments.	17,259	7,875	20,866	25,352	20,082	1,556	105	26,709	1,074	(2)	(2)	120,938
1911–12:												
Receipts...	35,563	8,497	96,889	30,598	15,336	6,930	2,861	23,627	1,518	11,030	176	233,025
Shipments.	30,003	3,411	52,745	25,571	12,790	4,644	401	16,970	1,106	9,690	173	157,504
1912–13:												
Receipts...	44,168	10,337	126,161	83,530	38,792	4,734	977	48,374	1,951	20,193	1,560	380,779
Shipments.	43,325	5,685	32,761	75,435	27,179	2,475	715	33,415	1,616	13,133	462	236,261
1913–14:												
Receipts...	50,884	6,372	103,679	62,799	27,244	5,802	1,442	32,152	1,629	16,453	1,898	310,354
Shipments.	47,905	3,442	28,994	64,799	22,242	3,704	842	23,730	1,424	11,958	812	209,852
Av., 1909–10 to 1913–14:												
Receipts...	37,111	8,750	102,067	52,048	24,713	5,203	1,821	35,756	1,525	15,892	1,211	286,097
Shipments.	31,816	4,434	31,182	48,287	20,383	2,771	446	24,576	1,244	11,594	482	177,215
1914–15:												
Receipts...	107,708	9,550	112,716	62,268	34,196	7,089	2,763	77,745	3,786	17,767	3,028	438,616
Shipments.	91,112	7,010	39,510	59,867	26,913	4,168	2,012	65,650	3,527	11,639	916	311,324
1915–16:												
Receipts...	85,819	7,337	163,202	95,674	42,226	9,965	2,809	70,442	4,503	25,613	4,851	512,441
Shipments.	61,531	3,505	54,932	82,540	31,046	5,571	1,580	51,632	5,336	16,215	1,967	315,855
1916–17:												
Receipts...	56,708	10,595	119,701	30,978	41,024	5,719	2,724	68,720	2,870	31,194	2,890	373,123
Shipments.	47,342	8,099	39,689	36,789	33,080	2,590	1,082	62,878	2,468	29,221	929	264,167
1917–18:												
Receipts...	13,735	13,138	82,229	16,602	17,023	4,583	1,597	22,226	2,195	8,565	2,990	184,883
Shipments.	8,118	1,336	19,072	13,646	13,234	1,379	260	8,255	1,422	6,096	1,192	74,010
1918–19:												
Receipts...	54,533	15,535	117,787	88,383	42,547	5,940	1,60	854,106	3,405	19,730	6,477	410,051
Shipments.	67,122	12,575	38,174	86,932	25,621	1,348	30	635,696	3,371	15,115	2,080	288,340
1919–20:												
Receipts...	74,167	7,006	119,419	18,317	45,266	8,046	1,688	92,215	3,663	26,585	7,471	403,843
Shipments.	57,215	3,674	37,468	13,664	32,956	2,285	289	55,673	4,285	21,992	1,340	230,841
1920–21:												
Receipts...	30,615	4,424	118,579	45,083	45,316	5,052	1,656	87,148	2,199	28,192	4,491	372,755
Shipments.	27,886	2,556	50,724	43,272	31,479	1,400	149	64,637	2,011	24,372	458	248,944
Av., 1914–15 to 1920–21:												
Receipts...	60,469	9,655	119,090	51,044	38,227	6,628	2,121	67,512	3,260	22,521	4,600	385,127
Shipments.	51,461	5,536	39,938	48,101	27,761	2,677	811	49,203	3,203	17,807	1,269	247,767
1921–22:[3]												
Receipts...	51,548	9,676	105,343	49,226	39,009	6,753	1,578	90,574	2,564	25,310	4,056	385,637
Shipments.	45,803	7,464	43,237	49,843	29,404	3,622	234	69,085	1,709	25,559	890	276,850
Months												
1921–22												
July:												
Receipts...	14,070	1,442	7,043	2,263	8,932	943	159	17,115	414	5,529	1,790	59,700
Shipments.	3,921	949	3,938	2,667	3,622	91	5	7,610	378	2,674	347	26,202
August:												
Receipts...	13,270	2,893	15,036	6,192	7,159	1,063	187	15,675	983	5,874	587	68,919
Shipments.	18,390	3,253	5,556	4,300	4,762	189	12	11,138	290	6,451	133	54,474
September:												
Receipts...	3,297	4,023	13,208	12,567	4,207	595	103	9,271	235	3,399	191	51,096
Shipments.	4,478	1,415	8,163	13,667	3,922	381	71	8,411	230	4,092	147	44,977
October:												
Receipts...	1,956	515	16,668	8,705	3,589	656	139	7,434	93	2,046	213	42,014
Shipments.	1,836	356	5,570	7,748	3,234	265	10	6,847	74	2,273	62	28,275
November:												
Receipts...	1,157	104	8,870	5,523	1,585	1,776	93	4,361	89	637	147	24,342
Shipments.	2,074	495	2,840	7,681	1,506	639	27	3,672	65	1,026	61	20,086
December:												
Receipts...	795	103	8,180	2,851	1,705	470	129	6,288	59	921	115	21,616
Shipments.	700	83	2,264	3,097	1,302	478	23	3,243	59	1,004	24	12,277

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[1] Compiled from Chicago Daily Trade Bulletin.

[2] No report.

[3] 1921–22 figures subject to revision.

WHEAT—Continued.

TABLE 33.—*Wheat: Monthly and yearly receipts and shipments, 11 primary markets, 1909–10 to 1921–22*—Continued.

	Chicago	Milwaukee	Minneapolis	Duluth	St. Louis	Toledo	Detroit	Kansas City	Peoria	Omaha	Indianapolis	Total
Months 1921–22	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*	*1,000 bush.*
January:												
Receipts...	702	68	7,799	856	1,801	126	151	5,358	112	822	116	17,911
Shipments.	637	171	2,375	312	1,862	158	26	4,052	58	1,182	18	10,851
February:												
Receipts...	1,393	114	7,190	661	2,254	343	152	7,781	145	1,593	216	21,842
Shipments.	918	135	2,131	150	1,731	393	7	4,511	127	1,112	10	11,225
March:												
Receipts...	1,229	66	7,018	2,548	2,449	217	156	3,981	222	1,009	152	19,047
Shipments.	1,284	132	3,270	240	2,304	332	23	4,935	173	1,074	48	13,815
April:												
Receipts...	2,103	121	3,562	1,247	1,242	135	100	2,871	95	904	164	12,544
Shipments.	1,063	128	1,460	331	1,151	158	9	3,231	76	1,187	21	8,815
May:												
Receipts...	9,414	117	5,314	2,707	2,559	275	125	5,385	85	2,049	174	28,204
Shipments.	3,002	208	2,531	6,221	2,234	347	9	7,291	91	3,025	17	24,976
June:												
Receipts...	2,162	110	5,455	3,106	1,527	154	84	5,054	32	527	191	18,402
Shipments.	7,500	139	3,139	3,429	1,774	191	12	4,144	88	459	2	20,877

BARLEY.

Table 34.—*Barley: Acreage, production, and total farm value, by States, 1920–1922.*

State	Thousands of acres			Production (thousands of bushels)			Total value, basis Dec. 1 price (thousands of dollars)		
	1920	1921	1922[1]	1920	1921	1922[1]	1920	1921	1922[1]
Maine	4	4	4	104	104	112	144	89	112
New Hampshire	1	1	1	26	23	28	38	25	27
Vermont	11	9	10	308	225	290	370	180	281
New York	170	158	158	4,930	3,318	4,108	4,881	2,057	3,040
Pennsylvania	15	13	12	360	280	306	324	174	199
Maryland	4	4	4	110	120	128	121	80	96
Virginia	10	9	9	270	207	248	270	149	198
Ohio	102	97	73	2,825	2,522	1,424	2,316	1,286	926
Indiana	81	65	42	2,187	1,235	714	1,903	593	414
Illinois	182	173	190	5,533	4,550	5,605	4,537	2,093	3,251
Michigan	255	200	140	6,630	3,500	3,500	5,768	1,995	2,275
Wisconsin	502	473	443	15,913	10,642	14,220	13,367	5,427	8,105
Minnesota	895	935	908	22,375	18,700	24,062	13,872	6,358	11,309
Iowa	180	136	150	4,950	3,196	4,260	3,118	1,342	2,087
Missouri	7	7	5	196	154	115	192	100	83
North Dakota	1,085	1,096	1,008	19,530	16,988	25,704	10,937	4,927	10,025
South Dakota	1,028	1,120	952	25,700	19,040	21,896	13,364	5,522	9,196
Nebraska	256	199	242	7,424	4,915	4,356	3,712	1,376	2,047
Kansas	767	728	1,074	19,482	14,560	19,332	8,767	4,222	8,699
Kentucky	5	6	6	140	144	168	161	88	143
Tennessee	6	9	14	138	189	315	152	189	252
Texas	78	78	93	1,794	1,872	1,767	1,346	842	1,149
Oklahoma	116	122	129	2,784	2,684	2,193	2,004	1,208	1,206
Montana	64	75	77	1,152	1,538	1,925	749	923	962
Wyoming	6	9	10	216	261	310	238	170	186
Colorado	216	202	186	5,292	4,444	3,534	3,969	1,644	2,085
New Mexico	11	10	10	260	240	140	195	146	133
Arizona	20	29	25	680	928	825	952	742	701
Utah	19	16	18	593	512	630	593	246	346
Nevada	5	6	6	150	187	176	248	150	176
Idaho	92	87	85	3,220	2,784	2,890	2,415	1,308	1,878
Washington	82	80	74	2,895	2,944	1,813	2,895	1,531	1,342
Oregon	75	70	80	2,415	2,240	2,160	2,415	1,120	1,598
California	1,250	1,188	1,152	28,750	29,700	36,864	28,750	16,632	23,224
United States	7,600	7,414	7,390	189,332	154,946	186,118	135,083	64,934	97,751

[1] Preliminary estimate.

Table 35.—*Barley: Average yield per acre in undermentioned countries, 1890–1922.*

Year	United States	Russia (European)	Germany	Austria	Hungary, proper	France	United Kingdom[1]
	Bushels	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*
Average:							
1890-1899	23.4	13.3	29.4	21.1	....	[1]22.6	39.8
1900-1909	25.5	14.3	35.3	26.3	23.4	[1]23.6	35.0
1910-1919	25.1	[2]15.6	33.2	26.3	[3]24.2	23.1	33.6
1919	22.0	....	27.6	16.4	....	17.5	30.8
1920	24.9	....	27.9	18.5	17.8	23.4	32.1
1921	20.9	....	31.7	19.6	18.0	22.8	30.4
1922	26.0	....	25.6	16.8	19.0	24.4	....

[1] Winchester bushels. [2] Seven-year average. [3] Six-year average.

BARLEY—Continued.

TABLE 36.—*Barley: Area and production in undermentioned countries.*[1]

Country	Area				Production			
	Average, 1909-1913	1920	1921	1922[2]	Average, 1909-1913	1920	1921	1922[2]
NORTHERN HEMISPHERE								
NORTH AMERICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Canada[3]	1,574	2,552	2,796	2,732	45,275	63,311	59,709	76,396
United States[3]	7,602	7,600	7,240	7,550	184,812	189,332	151,181	196,431
Mexico	....	....	....	....	6,666	....	....	....
Total North American countries marked[3]	9,194	10,152	10,036	10,282	230,087	252,643	210,890	272,827
EUROPE								
United Kingdom:								
England and Wales[3]	1,488	1,637	1,436	1,364	50,164	50,680	42,472	40,480
Scotland	191	204	171	157	7,103	7,784	5,912	....
Ireland	165	207	175	....	7,493	7,224	5,712	....
Norway	[4]89	156	156	....	2,867	5,382	4,279	....
Sweden[3]	451	398	400	427	14,592	11,175	12,326	13,274
Denmark[3]	[4] [5]591	626	628	666	[5]22,589	24,707	27,548	29,032
Netherlands[3]	68	56	61	62	3,270	2,660	3,302	2,866
Belgium[3]	[6]85	91	96	86	4,247	4,351	5,117	3,991
Luxemburg	3	5	5	5	82	105	74	....
France[3]	[5]1,866	1,641	1,679	1,623	[5]46,489	38,382	38,318	39,534
Spain[3]	3,509	4,319	4,335	4,217	74,689	90,462	89,320	74,795
Portugal	....	....	....	....	....	1,797	[1]1,913	....
Italy[3]	[5]613	[5]494	[5]540	574	[5]10,104	[5]5,870	[8]11,119	8,768
Malta	5	8	....	....	109	190	....	....
Switzerland[3]	13	18	16	16	441	619	551	491
Germany[3]	[5]3,976	2,949	2,808	2,841	[5]153,529	82,344	89,056	72,631
Austria[3]	[5]2,712	238	266	309	[5]71,988	4,392	5,201	5,190
Czechoslovakia[3]	....	1,716	1,613	1,670	....	37,238	47,471	42,144
Hungary[3]	[5]2,760	1,266	1,187	1,130	[5]69,812	22,585	21,408	21,449
Yugoslavia[3]	....	926	909	926	....	11,699	13,378	13,050
Servia[3]	[5]242	....	....	....	[5]5,072	....	....	....
Bosnia-Herzegovina[3]	[5]214	....	....	....	[5]3,455	....	....	....
Croatia-Slavonia[3]	[5]158	....	....	....	[5]2,540	....	....	....
Bulgaria[3]	[5]616	554	551	554	[5]12,425	9,451	9,094	9,324
Rumania[3]	[5]1,319	3,392	3,878	4,267	[5]24,821	65,161	47,619	84,710
Poland[3]	[5]1,249	1,944	2,451	2,825	[5]27,150	38,567	56,204	59,581
Lithuania	....	....	414	....	....	....	8,972	....
Latvia	....	306	362	388	....	3,054	6,496	6,980
Esthonia	....	....	275	....	....	....	4,690	....
Finland[3]	[5] [9]273	293	297	297	[5]5,737	4,983	4,939	4,557
Russia, including Ukraine and Northern Caucasia	[5]26,810	....	....	....	[5]440,047	....	....	....
Total European countries marked[3]	22,203	22,558	23,151	23,854	603,114	505,326	524,443	525,867
AFRICA								
Morocco	....	2,341	1,905	2,150	....	39,645	29,510	22,506
Algeria[3]	3,353	2,795	2,508	2,868	41,961	29,932	48,226	19,805
Tunis[3]	1,145	927	1,230	603	[6]7,900	2,618	11,482	1,378
Egypt[3]	[10]394	340	394	375	[6]11,843	10,449	11,941	11,306
Total African countries marked[3]	4,892	4,062	4,132	3,846	61,704	42,999	71,649	32,489

[1] Official sources, unless otherwise stated.

[2] Figures for 1922 and 1921-22 compiled from reports received up to Nov. 15, 1922.

[3] Indicates countries reporting for all periods either as listed or as part of some other country.

[4] Three-year average.

[5] Old boundaries.

[6] Four-year average.

[7] Unofficial.

[8] Includes 758,000 bushels grown in Venezia Tridentina and Venezia Giulia.

[9] One year only.

[10] Two-year average.

BARLEY—Continued.

TABLE 36.—*Barley: Area and production in undermentioned countries*[1]—Continued.

Country	Area				Production			
	Average, 1909-1913	1920	1921	1922[2]	Average, 1909-1913	1920	1921	1922[2]
NORTHERN HEMISPHERE—Cont. Asia	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Cyprus	....	105	130	....	2,151	2,209	2,234	....
India:								
British India	7,836	7,419	6,203	....	40,973	149,380	117,040	....
Native States	917	1,033	....	....	....	....	....	....
Russia, Asiatic	829	....	....	....	11,171	....	....	....
Japanese Empire:								
Japan	3,183	2,987	2,929	....	89,528	84,909	87,884	85,849
Chosen	843	....	1,979	....	19,436	36,539	36,727	32,316
Formosa	[3]5	....	....	....	53	....	....	....
Total Asiatic countries marked[4]	....	....	....	....	....	....	....	....
Total Northern Hemisphere countries marked[4]	36,289	36,772	37,319	37,982	894,905	800,968	806,982	831,183
Country	Average, 1908-9 to 1912-13	1919-20	1920-21	1921-22	Average, 1908-9 to 1912-13	1919-20	1920-21	1921-22
SOUTHERN HEMISPHERE	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Chile[4]	[5]117	126	128	139	[5]3,924	3,691	5,035	5,376
Uruguay[4]	[5]4	5	5	3	[5]61	76	82	42
Argentina	[5]268	615	667	....	[5]3,626	10,279	11,161	....
Union of South Africa[4]	[6]109	99	91	87	2,015	[7]720	1,137	1,282
Australia	137	267	....	....	2,819	4,288	....	....
New Zealand[4]	39	23	47	33	1,402	816	1,587	1,151
Total Southern Hemisphere countries marked[4]	269	253	271	262	7,402	5,303	7,841	7,851
Total world countries marked[4]	36,558	37,025	37,590	38,244	902,307	806,271	814,823	839,034
Total world, all countries reporting	77,839	52,678	52,961	40,944	1,536,431	1,159,056	1,137,427	986,685

[1] Official sources unless otherwise stated.

[2] Figures for 1922 and 1921-22 compiled from reports received up to November 15, 1922.

[3] Three-year average.

[4] Indicates countries reporting for all periods either as listed or as part of some other country.

[5] Two-year average.

[6] One year only.

[7] Excluding production in native location which amounted to 29,056 bushels in 1918.

TABLE 37.—*Barley: World production so far as reported, 1895–1922.*

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		*Bushels*		*Bushels*		*Bushels*
1895	915,504,000	1902	1,229,132,000	1909	1,458,263,000	1917	1,189,868,000
1896	932,100,000	1903	1,235,786,000	1910	1,388,734,000	1917	[1]936,050,000
1897	864,605,000	1904	1,175,784,000	1911	1,373,286,000	1918	[1]1,074,158,000
1898	1,030,581,000	1905	1,180,053,000	1912	1,466,977,000	1919	[1]972,937,000
1899	965,720,000	1906	1,296,579,000	1913	1,650,265,000	1920	[1]1,159,056,000
1900	959,622,000	1907	1,271,237,000	1914	1,463,289,000	1921	[1]1,137,427,000
1901	1,072,195,000	1908	1,274,897,000	1915	1,439,857,000	1922	[1]986,685,000

[1] Russia not included In 1915 Russia produced about 28 per cent of the reported world production.

RYE.

TABLE 38.—*Rye: Acreage, production, and total farm value, by States, 1921–1922.*

State	Thousands of acres		Production (thousands of bushels)		Total value, basis Dec. 1 price (thousands of dollars)	
	1921	1922[1]	1921	1922[1]	1921	1922[1]
Massachusetts	2	3	30	57	52	80
Connecticut	5	5	95	100	142	150
New York	52	55	806	880	798	854
New Jersey	57	61	998	1,159	1,018	985
Pennsylvania	200	220	3,200	3,740	3,040	3,254
Delaware	4	5	44	70	44	74
Maryland	17	17	238	258	219	284
Virginia	38	40	418	460	397	414
West Virginia	10	10	120	120	114	114
North Carolina	39	40	273	320	341	384
South Carolina	5	6	50	60	125	108
Georgia	12	18	108	171	189	231
Ohio	83	87	1,079	1,235	906	1,025
Indiana	306	318	3,978	3,816	2,904	3,015
Illinois	197	256	3,349	4,096	2,679	3,072
Michigan	642	648	8,346	8,294	5,842	6,303
Wisconsin	371	489	5,046	7,139	3,583	5,140
Minnesota	640	1,154	11,200	21,926	6,944	14,910
Iowa	35	60	564	1,140	412	798
Missouri	30	28	336	336	289	312
North Dakota	930	1,581	10,230	24,506	5,933	14,704
South Dakota	191	439	3,056	7,902	1,772	4,583
Nebraska	151	188	1,918	2,106	1,151	1,369
Kansas	101	71	1,141	852	776	596
Kentucky	18	20	180	230	202	253
Tennessee	19	20	152	180	205	214
Alabama	1	1	12	5	19	8
Texas	13	13	156	117	156	146
Oklahoma	34	31	408	310	269	248
Arkansas	1	1	9	12	12	12
Montana	116	126	1,299	1,827	688	987
Wyoming	24	21	504	294	292	153
Colorado	92	97	1,058	873	635	576
New Mexico	5	2	70	8	49	8
Utah	15	12	140	120	98	72
Idaho	12	11	216	165	151	111
Washington	21	19	294	169	191	161
Oregon	39	37	554	444	377	377
United States	4,528	6,210	61,675	95,497	43,014	66,085

[1] Preliminary estimate.

TABLE 39.—*Rye: Average yield per acre in undermentioned countries, 1890–1922.*

Year	United States	Russia (European)	Germany	Austria	Hungary proper	France	Ireland[1]
	Bushels	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*	*Bushels*
Average:							
1890-1899	13.9	10.4	20.9	16.1	....	[1]17.6	25.2
1900-1909	15.7	11.5	25.6	19.0	17.6	[1]17.1	27.5
1910-1919	12.7	[2]11.8	25.2	18.0	[3]18.4	15.6	[4]29.3
1919	12.0	....	22.1	12.6	....	15.2	....
1920	13.7	....	18.3	14.1	13.9	15.0	....
1921	13.7	....	25.4	16.7	16.9	19.9	....
1922	15.5	....	20.5	15.6	16.7	18.0	....

[1] Winchester bushels. [2] Seven-year average. [3] Six-year average. [4] Nine-year average.

RYE—Continued.

TABLE 40.—*Rye: Area and production in undermentioned countries.*

Country	Area				Production			
	Average, 1909-1913	1920	1921	1922[2]	Average, 1909-1913	1920	1921	1922[2]
NORTHERN HEMISPHERE								
NORTH AMERICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Canada[3]	117	650	1,842	2,410	2,094	11,306	21,455	49,602
United States[3]	2,236	4,409	4,228	5,148	36,093	60,490	57,918	79,623
Mexico	....	....	....	....	70	....	....	....
Total North American countries marked[3]	2,353	5,059	6,070	7,558	38,187	71,796	79,373	129,225
EUROPE								
United Kingdom:								
England and Wales	48	96	79	....	....	....	....	....
Scotland	6	7	6	6	....	....	....	....
Ireland	8	6	6	....	....	....	....	....
Norway	[4]37	36	36	....	974	970	1,043	....
Sweden[3]	977	914	913	872	23,859	22,434	27,811	23,031
Denmark[3]	[4]632	560	559	547	18,098	13,242	12,204	12,354
Netherlands[3]	557	492	499	491	16,422	14,795	17,987	13,252
Belgium[3]	644	523	559	531	22,675	18,168	21,273	18,598
Luxemburg	26	20	20	....	651	340	488	....
France[3]	[5]2,960	2,148	2,227	2,087	[5]48,647	32,130	44,392	37,610
Spain[3]	1,987	1,799	1,786	1,702	27,635	27,830	28,118	27,340
Portugal	....	762	....	....	....	5,154	....	....
Italy[3]	[5]303	[5]282	[5]287	322	[5]5,328	[5]4,539	[6]6,519	5,941
Switzerland[3]	60	52	50	48	1,783	1,622	1,559	1,488
Germany[3]	[5]15,387	10,588	10,539	10,250	[5]445,222	194,255	267,648	210,582
Austria[3]	[5]5,019	711	758	831	[5]112,752	10,046	12,661	12,990
Czechoslovakia[3]	....	2,238	2,181	2,178	....	32,941	53,735	45,798
Hungary[3]	[5]2,601	1,475	1,370	1,340	[5]48,716	20,564	23,177	22,361
Yugoslavia[3]	....	578	562	585	....	6,507	6,263	7,100
Serbia[3]	[5]114	....	....	....	[5]1,533	....	....	....
Bosnia-Herzegovina[3]	[5]39	....	....	....	[5]444	....	....	....
Croatia-Slavonia[3]	[5]185	....	....	....	[5]2,231	....	....	....
Bulgaria[3]	[5]530	464	489	482	[5]8,553	6,056	6,693	7,204
Rumania[3]	[5]317	777	807	660	4,652	9,676	9,023	7,400
Poland[3]	[5]5,261	7,236	8,866	11,225	[5]90,494	73,659	167,558	202,067
Lithuania	....	....	1,249	....	....	....	21,047	....
Latvia	....	486	560	583	....	4,686	9,806	7,823
Esthonia	....	....	353	....	....	....	5,908	....
Finland[3]	[5]592	603	606	578	[5]11,174	9,173	10,385	7,776
Russia, including Ukraine and Northern Caucasia	[5]65,122	....	....	....	[5]798,742	....	....	....
Total European countries marked[3]	38,165	31,440	33,058	34,729	890,218	497,637	717,006	662,892
ARICA AND ASIA								
Algeria	(7)	(7)	(7)	(7)	(7)	4	5	4
Russia, Asiatic	2,451	....	....	....	24,663	....	....	....
Total African and Asiatic countries marked[3]	....	....	....	....	....	....	....	....
Total Northern Hemisphere countries marked[3]	40,518	36,499	39,128	42,287	928,405	569,433	796,379	792,117

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[1] Official sources unless otherwise stated.
[2] Figures for 1922 and 1921-22 compiled from reports received up to Nov. 15, 1922.
[3] Countries reporting for all periods as listed or as part of some other country.
[4] Three-year average.
[5] Old boundaries.
[6] Includes 886,000 bushels grown in the new territory of Venezia Tridentina and Venzia Giulia.
[7] Less than 500

RYE—Continued.

TABLE 40.—*Ryc: Area and production in undermentioned countries*[1]—Continued.

Country	Area				Production			
	Average, 1908-9 to 1912-13	1919-20	1920-21	1921-22[2]	Average, 1908-09 to 1912-1	1919-20	1920-21	1921-22[2]
Southern Hemisphere	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Chile[3]	[4]6	4	3	3	[4]144	53	74	50
Uruguay	(5)	(5)	(5)	(5)	1	(5)	(5)	(5)
Argentina	[4]68	....	....	....	[4]949	....	....	....
Union of South Africa	[6]108	141	....	....	[6]608	596	....	....
Australia	9	(7)	....	....	108	32	....	....
New Zealand	5	....	....	....	97	....	....	....
Total Southern Hemisphere countries marked[3]	6	4	3	3	144	53	74	50
World total, all countries marked[3]	40,524	36,503	39,131	42,290	928,549	569,486	796,453	792,167
World total, all countries reporting -	108,412	38,061	41,440	42,879	1,755,412	581,268	834,750	799,994

[1] Official sources unless otherwise stated.
[2] Figures for 1922 and 1921-22 compiled from reports received up to Nov. 15, 1922.
[3] Countries reporting for all periods either as listed or as part of some other country.
[4] Two-year average.
[5] Less than 500.
[6] One year only.

TABLE 41.—*Rye: World production so far as reported, 1895–1922.*

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		*Bushels*		*Bushels*		*Bushels*
1895	1,468,212,000	1902	1,647,845,000	1909	1,747,123,000	1916	1,432,786,000
1896	1,499,250,000	1903	1,659,961,000	1910	1,673,473,000	1917	[1]473,152,000
1897	1,300,645,000	1904	1,742,112,000	1911	1,753,933,000	1918	[1]561,165,000
1898	1,461,171,000	1905	1,495,751,000	1912	1,886,517,00	1919	[1]638,745,000
1899	1,583,179,000	1906	1,433,395,000	1913	1,880,387,000	1920	[1]581,268,000
1900	1,557,634,000	1907	1,538,778,000	1914	1,596,882,000	1921	[1]834,750,000
1901	1,416,022,000	1908	1,590,057,000	1915	1,583,206,000	1922	[1]799,994,000

[1] Russia not included. In 1915 Russia produced about 57 per cent of the reported world production.

FLAX.

TABLE 42.—*Flaxseed: Acreage, production, and total farm value, by States, 1921–22.*

State	Thousands of acres		Production (thousands of bushels)		Total value, basis Dec. 1 price (thousands of dollars)	
	1921	1922[1]	1921	1922[1]	1921	1922[1]
Wisconsin	6	4	63	52	94	94
Minnesota	314	377	2,983	3,770	4,504	8,219
Iowa	8	8	70	80	107	148
North Dakota	430	575	2,795	5,462	3,997	11,689
South Dakota	216	193	1,404	1,834	1,952	3,686
Nebraska	3	3	24	24	36	46
Kansas	20	20	134	120	181	223
Montana	110	127	550	889	770	1,751
Wyoming	1	1	6	7	7	13
United States	1,108	1,308	8,029	12,238	11,648	25,869

[1] Preliminary estimate.

FLAX—Continued.

TABLE 43.—*Flax (seed and fiber): World production as far as reported, 1896–1921.*

Year	Production		Year	Production	
	Seed	Fiber		Seed	Fiber
	Bushels	*Pounds*		*Bushels*	*Pounds*
1896	82,684,000	1,714,205,000	1909	100,820,000	1,384,524,000
1897	57,596,000	1,498,054,000	1910	85,253,000	913,112,000
1898	72,938,000	1,780,693,000	1911	101,339,000	1,011,350,000
1899	66,348,000	1,138,763,000	1912	130,291,000	1,429,967,000
1900	62,432,000	1,315,931,000	1913	132,477,000	1,384,757,000
1901	72,314,000	1,050,260,000	1914	94,559,000	1,044,746,000
1902	83,891,000	1,564,840,000	1915	103,287,000	975,685,000
1903	110,455,000	1,492,383,000	1916	[1]82,151,000	175,239,000
1904	107,743,000	1,517,922,000	1917	[1]41,063,000	162,952,000
1905	100,458,000	1,494,229,000	1918	[1]61,821,000	98,982,000
1906	88,165,000	1,871,723,000	1919	61,692,000	436,329,000
1907	102,960,000	2,042,390,000	1920	87,964,000	639,024,000
1908	100,850,000	1,907,591,000	1921	83,288,000	465,269,000

[1] Russia not included. In 1915 Russia produced about 18 per cent of the reported world production of flax seed and 84 per cent of the fiber.

FLAX—Continued.

TABLE 44.—*Flax: Area and production in undermentioned countries, 1909–1922*—Continued.

Country	Area				Production							
					Seed				Fiber			
	Average, 1909-1913	1920	1921	1922[1]	Average, 1909-1913	1920	1921	1922[1]	Average, 1909–1913	1920	1921	1922[1]
NORTHERN HEMISPHERE												
NORTH AMERICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
Canada[2]	1,035	1,428	533	519	12,040	7,998	4,112	5,296	....	[3] [4]11,160	....	....
United States[2]	2,490	1,757	1,165	1,341	19,505	10,774	8,112	11,725	....	....	....	....
Total North American countries marked[2]	3,525	3,185	1,698	1,860	31,545	18,772	12,224	17,021	....	....	....	....
EUROPE												
United Kingdom												
England and Wales	([5])	22	8	10	....	....	....	....	....	....	....	....
Ireland[2]	53	127	40	....	....	....	....	....	23,701	38,125	10,725	....
Sweden	4	7	....	....	[6] 14	17	....	....	[6] 1,128	1,515	....	....
Netherlands [2]	33	60	22	22	374	628	249	....	17,276	31,418	10,853	7,840
Belgium [2]	50	125	37	41	[7] 472	862	328	315	[7] 51,888	152,831	20,030	15,430
France [2]	[8] 62	86	43	41	[8] 533	446	274	....	[8] 40,623	57,046	23,333	....
Spain [2]	....	3	4	....	....	52	46	....	....	710	1,160	....
Italy [2]	[7] 42	50	49	49	329	386	394	394	6,289	5,071	5,510	5,510
Germany	[9] 41	124	111	....	....	....	....	....	....	....	....	....
Austria [2]	[8] 97	8	8	....	[8] 694	38	45	....	[8] 53,116	4,904	6,740	....
Czechoslovakia [2]	....	54	59	57	....	313	300	....	....	28,830	28,693	....
Hungary	[8] 25	9	10	....	[8] 196	....	....	....	[8] 20,547	....	....	....
Yugoslavia [2]	....	35	36	28	....	....	....	....	....	19,430	18,210	....

[1] Figures for 1922 and 1921–22 compiled from reports received up to Nov. 1, 1922.
[2] Indicates countries reporting for all periods except 1922 either as listed or as part of some other country.
[3] Including flax tow.
[4] Grown on 31,000 acres. Almost exclusively in Ontario.
[5] Less than 500.
[6] Four-year average.
[7] Three-year average.
[8] Pre-war boundaries.
[9] One year.

FLAX—Continued.

TABLE 44.—*Flax: Area and production in undermentioned countries, 1909–1922.*

Country	Area				Production							
					Seed				Fiber			
	Average, 1909-1913	1920	1921	1922 [1]	Average, 1909-1913	1920	1921	1922 [1]	Average, 1909–1913	1920	1921	1922 [1]
NORTHERN HEMISPHERE—Continued												
EUROPE—continued	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
Serbia, Croatia-Slavonia, and Bosnia-Herzegovina [2]	[3] 21	....	....	....	[3] 21	....	....	....	[3] 10,564	....	....	....
Bulgaria [2]	[3] 1	1	2	2	[3] 7	7	18	15	[3] [4] 524	350	670	650
Rumania [2]	[3] 52	32	27	....	[3] 503	183	119	....	[3] 4,864	1,606	....	....
Poland [2]	(5)	121	175	....	(5)	794	1,287	....	(15)	68,282	92,614	....
Lithuania [2]	....	....	127	....	....	[6] 1,412	909	....	....	[6] 81,723	41,470	....
Latvia [2]	....	75	85	94	....	416	626	660	....	21,137	30,670	36,950
Esthonia [2]	....	[6] 50	50	....	....	[6] 187	275	....	....	[6] 11,366	15,910	....
Finland	[7] 12	14	14	....	....	....	....	....	....	....	....	....
Russia, including Ukraine and Northern Caucasia [2]	[3] [5] 3,409	1,538	[6] [8] 1,775	....	[3] [5] 21,338	[6] [8] 3,226	[6] [8] 2,904	....	[3] [5] 1,255,973	[9] 100,000	[9] 124,000	[9] 180,000
Total European countries marked [2]	3,820	2,365	2,412	....	24,271	8,950	7,774	....	1,459,954	621,223	430,588	....
AFRICA												
Morocco (French, Western)	....	96	44	....	....	229	....	....	....	....	....	....
Algeria [2]	1	[10] 1	(11)	1	11	[10] 6	[10] 5	6	....	[12] 220	....	....
Tunis [2]	....	8	9	4	37	33	59	4	....	....	....	....
Egypt	....	6	6	1	....	112	....	....	....	3,181	....	....
Kenya	....	....	26	....	....	....	84	....	....	....	[13] 9,701	....
Total African countries marked [2]	....	....	....	....	48	39	64	....	....	....	....	....
ASIA												
India:												
British	2,700	2,245	....	....	....	....	....	....	....	....	....	....
Native States	291	467	....	....	....	....	....	....	....	....	....	....
Total [14] [2]	3,818	3,103	2,268	2,993	19,870	16,760	10,800	17,360	....	....	....	....

Asiatic Russia	[3] 376	213	(8)	....	[3] 2,123	(8)	(8)	....	[3] 127,613	....	....	....
Japan	12	103	....	40	[4] 98	....	634	276	5,142	....	24,980	10,770
Total Asiatic countries marked [2]	3,818	3,103	2,268	....	19,870	16,760	10,800	....	....	....	....	....
Total Northern Hemisphere countries marked [2]	11,163	8,653	6,378	....	75,734	44,521	30,862	....	1,459,954	621,223	430,588	....

Country	Area				Production							
					Seed				Fiber			
	Average, 1908-9 to 1912-13	1919-20	1920-21	1921-22 [1]	Average, 1908-9 to 1912-13	1919-20	1920-21	1921-22 [1]	Average, 1908-9 to 1912-13	1919-20	1920-21	1921-22 [1]
SOUTHERN HEMISPHERE	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
Chile	3	1	....	1	35	13	....	8	43	....	....	210
Uruguay [2]	106	83	81	61	793	932	1,056	519	....	....	....	....
Argentina [2]	3,883	3,522	3,484	3,892	31,989	42,038	50,470	32,272	....	....	....	....
Australia	1	2	....	....	10	10	....	....	133	119	....	....
New Zealand [2]	....	5	10	6	....	92	182	121	....	....	....	....
Total Southern Hemisphere countries marked [2]	3,989	3,610	3,575	....	32,782	43,062	51,708	....	....	....	....	....
Total world countries marked [2]	15,152	12,263	9,953	....	108,516	87,583	82,570	....	1,459,954	621,223	430,588	....
Total world as far as reported	15,627	12,869	10,308	....	110,992	87,964	83,288	....	1,619,424	639,024	465,269	....

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[1] Figures for 1922 and 1921-22 compiled from reports received up to Nov. 1, 1922.
[2] Indicates countries reporting for all periods except 1922 either as listed or as part of some other country.
[3] Pre-war boundaries.
[4] Four-year average.
[5] Pre-war Poland included in Russia, Austria, and Germany.
[6] From an unofficial source.
[7] One year.
[8] Territory uncertain. Probably includes Asiatic Russia.
[9] These figures are rough estimates for the principal regions of European Russia where flax is grown for fiber.
[10] Department of Algiers and Oran only.
[11] Less than 500.
[12] Department of Oran only.
[13] Including flax tow.
[14] Including flaxseed grown with other crops.

POTATOES.

TABLE 45.—*Potatoes: Acreage, production, and total farm value, by States, 1921–22.*

State	Thousands of acres		Production (thousands of bushels)		Total value, basis Dec. 1 price (thousands of dollars)	
	1921	1922 [1]	1921	1922 [1]	1921	1922 [1]
Maine	129	135	38,442	21,600	32,676	9,720
New Hampshire	14	14	2,240	1,400	3,024	1,470
Vermont	25	25	3,750	3,000	3,900	2,790
Massachusetts	29	29	3,335	2,610	5,069	2,480
Rhode Island	3	3	345	270	552	243
Connecticut	23	24	2,369	3,360	3,554	3,360
New York	330	340	33,990	37,400	36,709	22,440
New Jersey	95	95	9,025	16,435	12,816	11,833
Pennsylvania	251	264	21,586	28,512	28,709	21,384
Delaware	10	10	500	960	550	672
Maryland	49	51	3,185	5,151	3,504	3,091
Virginia	149	155	16,092	16,585	17,701	10,780
West Virginia	48	49	4,080	4,851	6,650	4,220
North Carolina	46	48	4,048	4,512	5,789	4,557
South Carolina	30	33	2,550	2,508	3,825	3,210
Georgia	23	25	1,725	1,700	2,846	2,380
Flordia	17	26	1,564	2,600	2,972	4,550
Ohio	120	126	6,960	11,214	10,788	10,093
Indiana	70	74	3,570	5,624	5,176	4,724
Illinois	121	119	6,413	7,497	8,978	6,747
Michigan	340	357	27,200	37,842	25,840	12,866
Wisconsin	315	328	21,420	40,672	20,349	13,422
Minnesota	430	486	32,250	43,740	29,025	15,309
Iowa	96	94	4,128	8,460	5,779	5,668
Missouri	82	90	4,756	5,400	6,421	4,968
North Dakota	124	198	11,904	17,820	8,333	5,524
South Dakota	90	110	5,490	8,580	5,874	3,775
Nebraska	102	139	8,160	11,676	9,792	5,488
Kansas	65	65	4,160	4,160	5,616	3,827
Kentucky	58	59	3,770	4,720	6,220	4,720
Tennessee	35	32	1,820	2,560	3,003	2,816
Alabama	32	48	2,400	3,840	4,080	5,760
Mississippi	16	16	1,088	1,360	2,176	2,176
Louisiana	27	27	1,809	1,755	3,256	2,632
Texas	37	39	2,072	2,418	3,937	3,869
Oklahoma	36	40	2,088	2,720	3,863	3,346
Arkansas	33	35	1,815	2,380	3,267	3,094
Montana	41	46	4,715	5,796	3,772	2,318
Wyoming	19	23	2,052	2,530	2,421	1,265
Colorado	113	142	14,916	18,460	10,889	6,830
New Mexico	4	4	240	200	432	290
Arizona	4	6	460	510	644	459
Utah	15	21	2,415	4,137	2,053	1,655
Nevada	4	5	592	920	710	552
Idaho	64	86	11,840	15,910	9,117	4,932
Washington	60	65	8,100	9,425	8,019	4,241
Oregon	43	49	3,870	5,145	4,218	2,675
California	74	76	10,260	10,260	13,468	7,387
United States	3,941	4,331	361,659	451,185	398,362	262,608

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[1] Preliminary estimate.

TABLE 46.—*Potatoes: Area and production in undermentioned countries.*

Country	Area				Production			
	Average, 1909–1913	1920	1921	1922 [1]	Average, 1909–1913	1920	1921	1922 [1]
NORTHERN HEMISPHERE								
NORTH AMERICA	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Canada [2]	483	785	702	694	77,873	133,831	107,346	102,686
United States [2]	3,677	3,657	3,815	4,228	357,699	403,296	346,823	433,905
Mexico	....	....	....	....	924	....	1,552	....
Guatemala	....	2	4	4	....	96	73	....
Total North America [2]	4,160	4,442	4,517	....	435,572	537,127	454,169	....
EUROPE [3]								
United Kingdom:								
England and Wales [2]	434	545	558	561	99,890	117,637	110,432	144,110
Scotland [2]	145	162	154	157	34,674	46,181	38,827	....
Ireland [2]	590	584	568	....	119,874	74,141	95,427	....
Norway [2]	102	130	130	....	24,821	31,076	26,219	....
Sweden [2]	379	367	365	....	60,327	61,639	68,525	....
Denmark [2]	[4] 145	228	208	204	[4] 30,864	45,316	50,173	44,240
Netherlands [2]	414	427	441	454	110,153	121,514	107,346	124,523
Belgium [2]	390	366	419	442	107,021	82,912	71,534	79,367
Luxemburg [2]	36	33	33	36	6,439	5,284	2,644	....
France [2]	[4] 3,841	3,560	3,595	3,566	[4] 489,377	427,610	305,324	....
Spain [2]	687	841	789	806	93,413	107,834	102,225	....
Portugal	....	63	....	....	....	6,218	....	....
Malta [2]	4	3	2	....	672	632	554	....
Italy [2]	658	744	763	741	60,813	52,260	58,359	....
Switzerland [2]	186	123	113	112	40,537	28,256	25,373	24,820
Germany [2] [3]	[4] 8,260	5,986	6,541	6,723	[4] 1,681,959	1,024,301	960,889	1,442,180
Austria [2]	[4] 3,105	290	313	....	[4] 456,485	24,600	26,207	....
Czechoslovakia	....	1,494,	1,574	1,607	....	183,810	159,068	290,469
Hungary	[4] 1,521	626	665	466	[4] 180,103	75,967	45,899	33,951
Yugoslavia [2]	....	349	532	....	....	38,452	28,387	....
Serbia, Croatia-Slavonia, and Bosnia-Herzegovina [2]	[4] 292	....	....	....	[4] 27,814	....	....	....
Bulgaria [2]	[4] 8	20	19	20	454	977	1,650	1,360
Rumania [2]	[4] [5] 86	241	409	362	[4] [6] 4,778	22,363	49,607	....
Poland [2]	[4] 2,628	4,061	4,796	5,303	[4] 373,917	664,920	617,272	1,034,557
Lithuania	....	....	326	....	....	....	50,945	....
Latvia	....	122	146	170	....	13,761	24,759	24,598
Esthonia	....	156	....	....	....	25,240	....	....
Finland [2]	184	208	198	185	20,975	17,865	18,245	16,009
Russia, including Ukraine and northern Caucasia	[4] 8,499	....	....	....	[4] 878,461	....	....	....
Total Europe [2]	24,095	21,388	23,185	....	4,025,360	3,255,547	2,970,186	....
AFRICA								
Algeria [2]	45	42	46	46	1,783	985	653	1,925
Tunis	....	3	2	3	....	147	147	165
Total Africa [2]	45	42	46	46	1,783	985	653	....
ASIA								
Russia, Asiatic	399	....	....	....	33,151	....	....	....
Japanese Empire:								
Japan	174	296	....	....	24,738	39,736	....	....
Chosen [2]	[7] 65	186	187	....	[7] 6,960	18,470	18,371	....
Total Asia [2]	65	186	187	....	6,960	18,470	18,371	....
Total Northern Hemisphere [2]	28,365	26,058	27,935	....	4,469,675	3,812,129	3,433,379	....

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[1] Figures for 1922 and 1921–22 compiled from reports received up to Nov. 1, 1922.

[2] Indicates countries reporting for all periods except 1922 either as listed or as part of some other country.

[3] In Germany and some other European countries a considerable portion of the crop is for nonfood purposes.

[4] Old boundaries.

[5] Includes 58,000 acres grown with corn.

[6] Includes 1,144,000 bushels grown with corn.

[7] Two-year average.

POTATOES—Continued.

TABLE 46.—*Potatoes: Area and production in undermentioned countries*—Continued.

Country	Area				Production			
	Average, 1908–9 to 1912-13	1919-20	1920-21	1921-22[1]	Average, 1908–9 to 1912–13	1919–20	1920–21	1921–22[1]
SOUTHERN HEMISPHERE	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 acres*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
Chile [2]	66	76	83	73	8,023	10,377	12,377	13,877
Uruguay	....	6	9	....	....	138	150	....
Argentina	235	370	....	....	40,216	....	....	....
Union of South Africa	[3] 62	100	....	....	[3] 3,071	3,367	3,734	....
Rhodesia, southern	....	2	2	2	....	118	119	50
Australia	137	114	....	....	14,077	10,984	....	....
New Zealand [2]	28	25	22	19	6,047	5,402	4,728	4,185
Total Southern Hemisphere [2]	94	101	105	....	14,070	15,779	16,896	....
Total all countries [2]	28,459	26,159	28,040	....	4,483,745	3,827,908	3,460,275	....
Total all countries reporting	37,965	27,393	28,529	....	5,478,383	3,927,713	3,541,754	....

[1] Figures for 1922 and 1921–22 compiled from reports received up to Nov. 1, 1922.

[2] Indicates countries reporting for all periods except 1922 either as listed or as part of some other country.

[3] 1911 census.

TABLE 47.—*Potatoes: World production so far as reported, 1900–1921.*

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		*Bushels*		*Bushels*		*Bushels*
1900......	4,382,031;000	1906...	4,789,112,000	1912...	5,872,953,000	1918...	[1] 2,744,444,000
1901 ...	4,669,958,000	1907...	5,122,078,000	1913...	5,802,910,000	1919...	[1] 2,963,720,000
1902 ...	4,674,000,000	1908...	5,295,043,000	1914...	5,016,291,000	1920...	[1] 3,927,713,000
1903 ...	4,409,793,000	1909...	5,595,567,000	1915...	4,848,726,000	1921...	[1] 3,541,754,000
1904 ...	4,298,049,000	1910...	5,242,278,000	1916... [1]	3,197,224,000		
1905 ...	5,254,598,000	1911...	4,842,109,000	1917... [1]	3,103,876,000		

[1] Russia not included. In 1915 Russia produced about 17 per cent of the reported world production.

HAY.

TABLE 48.—*Hay: Acreage, production, and total farm value, by States. 1921–22.*

States	Tame hay						Wild, salt, or prairie hay					
	Thousands of acres		Production (thousands of tons)		Total value, basis Dec. 1 price (thousands of dollars)		Thousands of acres		Production (thousands of tons)		Total value, basis Dec. 1 price (thousands of dollars)	
	1921	1922[1]	1921	1922[1]	1921	1922[1]	1921	1922[1]	1921	1922[1]	1921	1922[1]
Maine	1,245	1,233	996	1,541	19,920	20,187	15	15	13	16	214	176
New Hampshire	450	450	428	585	11,984	11,408	12	12	10	12	200	144
Vermont	900	909	945	1,273	20,790	22,278	13	13	13	14	234	147
Massachusetts	423	435	529	587	14,283	13,501	12	12	12	12	180	174
Rhode Island	45	45	50	54	1,350	1,431	1	1	1	1	17	18
Connecticut	320	323	416	436	10,816	11,336	9	9	10	9	170	146
New York	4,895	4,870	4,895	6,818	88,110	96,134	65	67	65	79	975	790
New Jersey	300	303	396	485	7,128	8,778	23	22	28	31	364	372
Pennsylvania	3,025	3,055	3,630	4,888	61,710	69,898	23	23	28	28	336	224
Delaware	73	77	88	116	1,540	2,204	1	2	1	2	8	20
Maryland	390	406	526	658	7,943	12,173	4	4	5	4	52	60
Virginia	930	976	911	1,220	16,125	19,520	12	14	9	14	130	189
West Virginia	725	768	870	1,037	15,225	17,422	11	11	12	13	144	182
North Carolina	690	800	897	1,120	17,761	20,384	42	45	42	54	546	837
South Carolina	396	455	321	455	6,420	7,962	6	6	5	6	80	89
Georgia	693	728	610	670	9,638	11,390	19	19	19	17	243	230
Florida	110	126	121	139	2,360	2,572	6	6	5	5	80	85
Ohio	3,213	3,374	4,081	4,892	46,932	52,834	2	2	3	3	30	30
Indiana	2,360	2,575	2,549	3,734	33,137	41,821	21	22	22	25	198	212
Illinois	3,172	3,645	3,743	5,285	50,530	66,062	62	62	74	78	755	780
Michigan	2,873	3,074	2,873	4,457	37,349	45,016	55	56	60	73	552	518
Wisconsin	3,064	3,155	4,136	5,553	63,694	68,302	364	335	437	436	3,933	3,357
Minnesota	1,949	1,988	2,924	3,141	25,146	33,609	2,033	2,053	2,602	2,505	16,913	19,288
Iowa	3,171	3,393	4,693	4,750	43,645	47,500	450	432	522	492	3,863	4,133
Missouri	3,200	3,520	3,616	3,872	35,437	44,528	129	134	142	127	852	952
North Dakota	961	1,028	1,297	1,655	9,987	12,412	2,308	2,469	2,308	2,592	17,310	12,960
South Dakota	970	1,000	1,358	1,750	8,691	13,125	3,500	3,675	2,800	3,308	15,400	18,194
Nebraska	1,565	1,553	3,427	3,323	23,989	37,218	2,256	2,208	1,895	1,877	9,475	15,954
Kansas	1,552	1,630	2,794	3,537	22,352	32,894	932	887	1,016	976	5,588	5,856
Kentucky	1,051	1,177	1,104	1,471	17,112	21,330	26	23	23	26	264	325
Tennessee	1,329	1,382	1,528	1,866	23,684	30,602	50	52	58	57	667	627
Alabama	836	760	752	760	11,731	12,920	25	25	22	22	264	297
Mississippi	428	458	492	550	7,134	7,975	40	41	40	45	448	518
Louisiana	208	214	266	342	3,724	4,549	15	18	20	25	200	225
Texas	639	671	882	1,074	8,732	12,351	203	201	223	221	2,074	2,210
Oklahoma	910	965	1,383	1,448	11,341	18,100	485	495	485	446	2,862	3,345
Arkansas	609	585	658	731	8,225	9,942	129	133	135	140	1,215	1,680
Montana	1,045	1,045	1,881	1,986	16,365	17,874	657	692	526	623	4,524	4,984
Wyoming	690	710	1,242	1,349	9,315	11,466	300	300	240	270	1,560	2,295
Colorado	1,195	1,239	2,510	2,354	17,319	26,365	407	366	407	355	2,442	3,195
New Mexico	191	172	458	310	5,817	6,045	48	30	41	24	451	432
Arizona	150	165	450	578	5,850	10,404	15	10	15	5	165	60
Utah	490	503	1,284	1,459	7,961	11,964	106	112	117	155	585	852
Nevada	177	179	473	507	4,257	5,983	179	181	199	288	1,791	2,736
Idaho	1,029	1,029	2,984	2,572	19,993	25,720	131	132	196	158	882	1,185
Washington	1,008	987	2,621	2,310	27,520	37,422	30	27	45	31	315	372
Oregon	995	965	2,288	1,930	22,422	26,248	233	228	256	228	1,152	1,596
California	2,129	2,108	5,003	5,059	55,033	75,885	167	160	184	176	1,288	1,584
United States	58,769	61,208	82,379	96,687	997,527	1,217,044	15,632	15,842	15,391	16,104	101,991	114,635

[1] Preliminary estimate.

CLOVER SEED.

TABLE 49.—*Clover seed: Acreage, production, and value, by States, 1921–22, and totals, 1916–1922.*

State and year	Thousands of acres		Average yield per acre (bushels)		Production (thousands of bushels)		Average farm price per bushel Nov. 15		Total value, basis Dec. 1 price (thousands of dollars)	
	1921	1922 [1]	1921	1922	1921	1922 [1]	1921	1922	1921	1922 [1]
New York	9	11	1.9	2.5	17	28	$13.00	$10.00	221	280
Pennsylvania	18	18	1.4	1.4	25	25	10.25	10.00	256	250
Ohio	172	206	1.2	1.1	206	227	10.70	10.70	2,204	2,429
Indiana	57	100	1.2	1.2	68	120	10.30	9.80	700	1,176
Illinois	143	210	1.4	1.5	200	315	10.05	9.60	2,010	3,024
Michigan	115	150	1.5	1.6	172	240	9.75	10.50	1,677	2,520
Wisconsin	98	127	1.7	1.8	167	229	9.90	10.20	1,653	2,336
Minnesota	74	72	2.1	2.1	155	151	10.00	9.40	1,550	1,419
Iowa	108	132	1.6	1.7	173	224	9.70	10.40	1,678	2,330
Missouri	17	21	1.7	1.7	29	36	10.55	9.00	306	324
Nebraska	9	8	2.2	2.7	20	22	9.00	10.00	180	220
Kansas	3	4	2.3	1.5	7	6	9.00	8.00	63	48
Kentucky	18	21	1.9	2.2	34	46	10.00	10.70	340	492
Tennessee	4	5	1.7	1.8	7	9	11.00	11.00	77	99
Mississippi	18	20	8.0	6.0	144	120	17.50	10.00	2,520	1,200
Idaho	18	16	5.0	4.5	90	72	9.75	9.70	878	698
Oregon	8	5	3.0	1.0	24	5	9.00	12.00	216	60
Total	889	1,126	1.7	1.7	1,538	1,875	10.75	10.08	16,529	18,905
1920	1,082		1.8		1,944		11.95		23,227	
1919	942		1.6		1,484		26.75		39,700	
1918	820		1.5		1,197		19.80		23,705	
1917	821		1.8		1,488		12.84		19,107	
1916	939		1.8		1,706		9.18		15,661	

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[1] Preliminary estimate.

TABLE 50.—*Clover seed: Farm price per bushel, 15th of each month, 1910–1922.*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1910	$8.26	$8.26	$8.15	$7.91	$7.47	$7.24	$7.17	$7.53	$8.27	$8.13	$7.70	$7.94	$7.84
1911	8.27	8.37	8.56	8.79	8.74	8.80	8.83	9.65	10.19	10.33	10.37	10.62	9.29
1912	10.89	12.22	12.89	12.91	12.53	11.69	10.64	9.80	9.39	9.37	9.06	9.00	10.87
1913	9.41	10.28	10.42	11.00	10.74	9.77	9.78	9.37	7.31	7.00	7.33	7.70	9.18
1914	7.99	8.07	8.17	8.06	7.87	7.96	8.12	8.76	9.10	8.24	8.02	8.12	8.21
1915	8.51	8.60	8.55	8.36	8.14	7.90	7.96	7.94	8.49	9.70	9.67	10.01	8.65
1916	10.27	10.47	10.76	10.58	9.98	9.47	9.15	9.12	8.65	8.54	9.20	9.40	9.63
1917	9 60	9.87	10.32	10.41	10.40	10.29	10.50	10.53	10.89	11.92	12.91	13.53	10.93
1918	14.48	16.46	17.49	17.86	16.56	15.88	14.71	15.2	0 16.6	1 19.0	1 20.0	320.67	17.08
1919	21.55	21.79	22.61	24.81	24.48	23.37	23.25	24.33	25.38	26.47	26.53	27.63	24.35
1920	28.06	31.21	31.88	32.23	29.84	26.21	25.52	19.97	17.77	13.18	11.64	10.28	23.15
1921	10.82	10.61	10.98	10.80	10.71	10.20	10.00	10.37	10.25	10.21	10.09	10.38	10.45
1922	10.69	11.88	13.00	13.13	12.84	11.60	11.00	9.88	8.85	9.66	10.18	10.88	11.13
Average, 1913–1922	13.14	13.92	14.42	14.72	14.16	13.26	13.00	12.55	12.33	12.39	12.62	12.86	13.28

APPLES.

TABLE 51.—*Apples: Production and farm prices December 1, by States, 1918–1922.*

State	Total crop (thousands of bushels)					Farm price per bushel Dec. 1 (cents)				
	1918	1919	1920	1921	1922 [1]	1918	1919	1920	1921	1922
Maine	2,010	4,829	1,680	4,060	1,250	95	117	120	115	107
New Hampshire	1,155	1,364	1,200	700	775	110	160	150	175	135
Vermont	990	960	993	600	960	140	175	150	195	160
Massachusetts	2,430	3,187	3,575	1,125	3,010	160	200	120	240	145
Rhode Island	189	334	390	63	200	155	195	200	250	110
Connecticut	999	1,395	2,375	758	1,300	155	170	125	240	120
New York	40,878	14,350	47,087	13,500	36,000	112	200	75	205	81
New Jersey	2,463	1,666	2,942	667	2,610	160	200	120	270	95
Pennsylvania	16,080	5,513	18,584	2,208	11,400	120	225	90	260	96
Delaware	714	606	822	68	980	125	200	95	220	90
Maryland	2,034	1,519	2,600	225	1,800	110	200	78	195	90
Virginia	10,068	8,943	13,744	570	8,360	124	160	90	255	90
West Virginia	5,856	4,189	8,040	420	5,625	117	180	125	260	102
North Carolina	3,588	2,000	6,320	593	5,570	130	187	105	250	90
South Carolina	1,407	216	440	293	383	205	280	184	230	140
Georgia	1,713	417	1,270	698	1,135	165	245	165	200	100
Ohio	7,005	2,976	13,960	3,390	7,298	153	262	115	225	130
Indiana	1,794	1,190	4,596	1,029	4,148	180	267	143	230	123
Illinois	3,459	4,673	5,866	2,381	9,720	185	230	140	250	105
Michigan	9,792	5,844	16,500	6,317	11,850	115	220	77	195	88
Wisconsin	2,811	1,545	2,250	1,050	2,024	155	220	170	242	118
Minnesota	996	1,336	1,350	900	1,020	209	250	200	260	200
Iowa	1,584	1,810	4,410	630	4,410	206	275	191	274	117
Missouri	4,245	5,132	4,724	480	9,400	164	190	170	255	82
South Dakota	273	168	180	126	263	235	300	260	280	170
Nebraska	525	907	797	125	1,620	230	250	230	270	120
Kansas	1,503	1,835	1,144	172	3,280	190	210	220	250	100
Kentucky	2,799	1,281	5,022	636	5,070	170	250	160	250	130
Tennessee	4,050	1,259	4,280	754	4,250	156	225	142	245	116
Alabama	1,662	577	1,186	890	1,098	170	250	175	200	145
Mississippi	....	218	190	145	216	......	235	190	240	170
Louisiana	....	44	34	35	37	......	200	200	200	225
Texas	273	487	274	274	2,640	160	190	200	190	150
Oklahoma	660	1,600	585	486	1,140	201	175	230	210	135
Arkansas	1,290	7,164	3,900	120	2,400	140	170	140	200	102
Montana	792	850	825	975	610	210	175	180	150	100
Wyoming	....	30	18	19	45	......	350	......	250	200
Colorado	2,067	3,418	2,830	3,200	4,250	170	185	140	170	75
New Mexico	912	1,100	434	483	750	118	200	180	200	130
Arizona	138	125	80	47	77	240	225	250	250	205
Utah	786	760	1,064	1,037	1,085	140	170	120	130	80
Nevada	....	53	36	24	35	......	300	275	260	160
Idaho	1,200	3,800	3,420	4,500	3,900	170	180	145	130	72
Washington	16,491	25,295	21,502	29,062	25,678	125	155	140	125	100
Oregon	3,384	6,921	4,158	6,667	6,300	110	140	125	115	95
California	6,560	8,200	6,000	6,500	7,656	130	145	160	135	90
United States	169,625	142,086	223,677	99,002	203,628	132.8	183.6	114.8	168.0	99.3

[1] Preliminary estimate.

TABLE 52.—*Apples: Total aggregate production (bushels) in the United States, 1889–1922.*

Year	Production	Year	Production	Year	Production	Year	Production
1889 [1]	*143,105,000*	1898	118,061,000	1907	119,560,000	1915	230,011,000
1890	80,142,000	1899 [1]	*175,397,000*	1908	148,940,000	1916	193,905,000
1891	198,907,000	1900	205,930,000	1909 [1]	*146,122,000*	1917	166,749,000
1892	120,536,000	1901	135,500,000	1910	141,640,000	1918	169,625,000
1893	114,773,000	1902	212,330,000	1911	214,020,000	1919	142,086,000
1894	134,648,000	1903	195,680,000	1912	235,220,000	1920	223,677,000
1895	219,600,000	1904	233,630,000	1913	145,410,000	1921	99,002,000
1896	232,600,000	1905	136,220,000	1914	253,200,000	1922	203,628,000
1897	163,728,000	1906	216,720,000				

[1] Census figures

LIVE STOCK, 1922

COMPILED IN THE U. S. BUREAU OF AGRICULTURAL ECONOMICS.

HORSES AND MULES.

TABLE 53.—*Horses and mules: Number and value on farms, January 1, 1922, and 1923, by States.*

State	Horses						Mules					
	Number (thousands) Jan. 1		Average price per head Jan. 1		Farm value (thousands of dollars Jan. 1)		Number (thousands) Jan. 1		Average price per head Jan. 1		Farm value (thousands of dollars) Jan. 1	
	1922	1923[1]	1922	1923	1922	1923[1]	1922	1923[1]	1922	1923	1922	1923[1]
Me.	92	91	$125.00	$122.00	$ 11,500	$ 11,102	......	......	......	......	......	......
N. H.	36	35	114.00	114.00	4,104	3,990	......	......	......	......	......	......
Vt.	76	76	110.00	104.00	8,360	7,904	......	......	......	......	......	......
Mass.	48	47	135.00	138.00	6,480	6,486	......	......	......	......	......	......
R. I.	6	6	138.00	133.00	828	798	......	......	......	......	......	......
Conn.	37	36	135.00	128.00	4,995	4,608	......	......	......	......	......	......
N. Y.	520	510	117.00	115 00	60,840	58,650	7	7	$133.00	$133.00	$ 931	$ 931
N. J.	72	72	133.00	129 00	9,576	9,288	6	6	151.00	131.00	906	786
Pa.	496	491	112.00	110 00	55,552	54,010	53	55	124.00	125.00	6,572	6,875
Del.	26	25	66.00	78 00	1,716	1,950	9	9	88.00	88.00	792	792
Md.	137	136	87.00	86.00	11,919	11,696	33	33	115.00	111.00	3,795	3,663
Va.	300	300	84.00	82.00	25,200	24,600	96	97	105.00	103.00	10,080	9,991
W. Va.	161	161	89.00	90.00	14,329	14,490	15	15	97.00	102.00	1,455	1,530
N. C.	166	166	108.00	108.00	17,928	17,928	257	260	129.00	128.00	33,153	33,280
S. C.	73	70	88.00	92.00	6,424	6,440	215	209	129.00	124.00	27,735	25,916
Ga.	99	95	76.00	83.00	7,524	7,885	394	390	99.00	105.00	39,006	40,950
Fla.	38	38	115.00	105.00	4,370	3,990	42	43	148.00	138.00	6,216	5,934
Ohio	787	771	99.00	93.00	77,913	71,703	31	32	100.00	97.00	3,100	3,104
Ind.	703	696	81.00	74.00	56,943	51,504	101	101	84.00	77.00	8,484	7,777
Ill.	1,207	1,183	69.00	70.00	83,283	82,810	168	170	75.00	77.00	12,600	13,090
Mich.	594	594	94.00	92.00	55,836	54,648	6	6	98.00	99.00	588	594
Wis.	656	643	93.00	104.00	61,008	66,872	4	4	98.00	103.00	392	412
Minn.	905	887	76.00	77.00	68,780	68,299	10	10	79.00	82.00	790	820
Iowa	1,305	1,305	73.00	79.00	95,265	103,095	90	101	78.00	80.00	7,020	8,080
Mo.	879	870	52.00	52.00	45,708	45,240	377	373	65.00	63.00	24,505	23,499
N. Dak.	813	797	55.00	56.00	44,715	44,632	8	8	72.00	69.00	576	552
S. Dak.	784	760	49.00	52.00	38,416	39,520	14	14	70.00	68.00	980	952
Nebr.	910	901	56.00	58.00	50,960	52,258	112	114	70.00	70.00	7,840	7,980
Kans.	1,019	1,019	48.00	45.00	48,912	45,855	301	307	59.00	58.00	17,759	17,806
Ky.	374	374	68.00	65.00	25,432	24,310	293	287	82.00	76.00	24,026	21,812
Tenn.	315	309	75.00	73.00	23,625	22,557	346	343	86.00	84.00	29,756	28,812
Ala.	130	129	76.00	78.00	9,880	10,062	299	311	94.00	99.00	28,106	30,789
Miss.	211	211	70.00	72.00	14,770	15,192	296	302	92.00	93.00	27,232	28,086
La.	173	171	77.00	71.00	13,321	12,141	178	176	118.00	113.00	21,004	19,888
Tex.	971	971	58.00	53.00	56,318	51,463	854	863	85.00	80.00	72,590	69,040
Okla.	708	715	45.00	40.00	31,860	28,600	337	337	65.00	58.00	21,905	19,546
Ark.	247	247	57.00	53.00	14,079	13,091	328	335	79.00	73.00	25,912	24,455
Mont.	670	643	41.00	38.00	27,470	24,434	9	9	69.00	60.00	621	540
Wyo.	202	198	39.00	33.00	7,878	6,534	3	3	61.00	58.00	183	174
Colo.	421	425	54.00	46.00	22,734	19,550	32	33	69.00	60.00	2,208	1,980
N. Mex.	177	181	50.00	45.00	8,850	8,145	21	21	72.00	66.00	1,512	1,386
Ariz.	135	135	68.00	62.00	9,180	8,370	12	12	89.00	76.00	1,068	912
Utah	128	128	70.00	69.00	8,960	8,832	3	3	66.00	62.00	198	186
Nev.	48	49	47.00	55.00	2,256	2,695	2	2	53.00	61.00	106	122
Idaho	281	273	63.00	58.00	17,703	15,834	8	8	73.00	65.00	584	520
Wash.	281	278	70.00	70.00	19,670	19,460	22	22	88.00	83.00	1,936	1,826
Oreg.	272	272	76.00	81.00	20,672	22,032	14	14	81.00	76.00	1,134	1,064
Calif.	367	363	82.00	81.00	30,094	29,403	61	61	102.00	103.00	6,222	6,283
U. S.	19,056	18,853	70.54	69.75	1,344,136	1,314,956	5,467	5,506	88.09	85.86	481,578	472,735

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[1] Preliminary estimate.

CATTLE.

TABLE 54.—*Cattle: Number and value on farms January 1, 1922 and 1923, by States.*

State	Milk cows						Other cattle					
	Number (thousands) Jan. 1		Average price per head Jan. 1		Farm value (thousands of dollars) Jan. 1		Number (thousands) Jan. 1		Average price per head Jan. 1		Farm value (thousands of dollars) Jan. 1	
	1922	1923[1]	1922	1923	1922	1923 [1]	1922	1923[1]	1922	1923	1922	1923 [1]
Maine	212	216	$48.00	$55.00	$ 10,176	$ 11,880	67	64	$20.20	$23.00	$ 1,353	$ 1,472
N. Hampshire	121	126	60.00	59.00	7,260	7,434	41	34	22.70	25.50	931	867
Vermont	367	385	55.00	56.00	20,185	21,560	84	82	16.80	18.80	1,411	1,542
Massachusetts	180	189	79.00	74.00	14,220	13,986	42	39	28.20	25.70	1,184	1,002
Rhode Island	26	27	79.00	84.00	2,054	2,268	7	7	31.20	30.20	218	211
Connecticut	138	141	74.00	78.00	10,212	10,998	39	38	29.70	29.50	1,158	1,121
New York	1,695	1,678	67.00	63.00	113,565	105,714	402	410	24.70	24.50	9,929	10,045
New Jersey	151	153	86.00	87.00	12,986	13,311	31	32	37.60	38.80	1,166	1,242
Pennsylvania	1,071	1,071	60.00	60.00	64,260	64,260	491	506	29.00	29.00	14,239	14,674
Delaware	39	40	57.00	55.00	2,223	2,200	9	10	26.90	29.00	242	290
Maryland	192	194	63.00	60.00	12,096	11,640	98	101	33.20	35.20	3,254	3,555
Virginia	426	430	43.00	42.50	18,318	18,275	438	469	24.70	27.30	10,819	12,804
West Virginia	216	222	49.50	48.00	10,692	10,656	354	365	28.60	33.90	10,124	12,374
North Carolina	365	365	42.00	39.00	15,330	14,235	274	274	17.30	17.10	4,740	4,685
South Carolina	230	228	40.00	35.00	9,200	7,980	195	189	13.80	12.50	2,691	2,362
Georgia	509	509	29.00	28.00	14,761	14,252	686	700	10.90	11.00	7,477	7,700
Florida	95	97	57.50	56.00	5,462	5,432	774	774	16.10	16.00	12,461	12,384
Ohio	1,048	1,069	56.00	56.00	58,688	59,864	832	857	29.70	31.70	24,710	27,167
Indiana	727	742	53.00	53.00	38,531	39,326	778	794	30.00	32.40	23,340	25,726
Illinois	1,125	1,148	52.00	56.00	58,500	64,288	1,432	1,561	29.30	34.00	41,958	53,074
Michigan	967	977	53.00	55.00	51,251	53,735	576	611	21.80	24.50	12,557	14,970
Wisconsin	2,195	2,195	52.00	57.00	114,140	125,115	885	876	19.60	22.40	17,346	19,622
Minnesota	1,578	1,641	48.00	47.00	75,744	77,127	1,343	1,289	18.00	20.40	24,174	26,296
Iowa	1,115	1,160	53.00	58.00	59,095	67,280	3,134	3,479	29.60	35.20	92,766	122,461
Missouri	769	777	44.00	45.00	33,836	34,965	1,890	2,003	26.50	28.70	50,085	57,486
North Dakota	484	503	43.00	44.00	20,812	22,132	848	814	18.50	21.40	15,688	17,420
South Dakota	417	450	47.00	51.00	19,599	22,950	1,601	1,521	24.20	29.40	38,744	44,717
Nebraska	553	570	53.00	57.00	29,309	32,490	2,477	2,700	27.40	31.80	67,870	85,860
Kansas	709	716	46.00	46.00	32,614	32,936	2,282	2,487	24.50	27.20	55,909	67,646
Kentucky	520	530	40.00	40.00	20,800	21,200	511	526	20.00	22.80	10,220	11,993
Tennessee	495	495	35.00	34.00	17,325	16,830	597	627	15.20	15.70	9,074	9,844
Alabama	506	516	29.00	27.00	14,674	13,932	515	515	10.00	9.60	5,150	4,944
Mississippi	541	541	30.00	27.00	16,230	14,607	677	677	10.80	9.50	7,312	6,432
Louisiana	220	216	43.00	38.00	9,460	8,208	591	585	15.20	14.70	8,983	8,600
Texas	1,073	1,052	43.00	36.00	46,139	37,782	5,363	5,041	19.90	18.60	106,724	93,763
Oklahoma	560	566	39.00	34.00	21,840	19,244	1,421	1,364	17.50	16.80	24,868	22,915
Arkansas	516	516	29.00	24.00	14,964	12,384	549	516	10.90	8.80	5,984	4,541
Montana	160	165	58.00	55.00	9,280	9,075	1,260	1,235	27.20	30.90	34,272	38,162
Wyoming	44	46	71.00	67.00	3,124	3,082	852	835	29.70	30.70	25,304	25,634
Colorado	243	253	57.00	53.00	13,851	13,409	1,361	1,361	26.40	25.40	35,930	34,569
New Mexico	48	47	60.00	50.00	2,880	2,350	1,132	838	24.90	21.90	28,187	18,352
Arizona	40	46	95.00	93.00	3,800	4,278	1,050	1,050	26.90	31.40	28,245	32,970
Utah	87	90	61.00	63.00	5,307	5,670	433	455	26.40	27.40	11,431	12,467
Nevada	19	21	69.00	74.00	1,311	1,554	346	356	30.40	32.70	10,518	11,641
Idaho	153	162	65.00	63.00	9,945	10,206	521	542	27.50	26.80	14,328	14,526
Washinton	289	283	70.00	61.00	20,230	17,263	261	253	28.30	26.40	7,386	6,679
Oregon	216	220	62.00	60.00	13,392	13,200	620	626	29.70	28.20	18,414	17,653
California	632	645	76.00	76.00	48,032	49,020	1,380	1,435	34.70	34.70	47,886	49,794
United States	24,082	24,429	50.83	50.83	1,227,703	1,241,673	41,550	41,923	23.80	25.67	988,760	1,076,254

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[1] Preliminary estimate.

SHEEP.

TABLE 55.—*Sheep: Number and value on farms January 1, 1921–1923.*

State	Number (thousands) Jan. 1			Average price per head Jan. 1			Farm value (thousands of dollars) Jan. 1		
	1921	1922	1923 [1]	1921	1922	1923	1921	1922	1923 [1]
Maine	100	95	90	$5.50	$4.80	$6.70	550	456	603
New Hampshire	24	20	18	7.30	5.60	7.80	175	112	140
Vermont	58	48	43	6.70	5.00	7.00	389	240	301
Massachusetts	17	17	16	9.50	6.60	6.90	162	112	110
Rhode Island	3	3	3	9.60	6.30	7.90	30	19	24
Connecticut	10	9	8	9.90	7.50	7.80	95	68	62
New York	550	512	532	7.50	5.80	8.50	4,125	2,970	4,522
New Jersey	10	10	10	10.50	7.40	7.50	105	74	75
Pennsylvania	478	468	477	7.60	5.80	7.10	3,633	2,714	3,387
Delaware	3	3	3	7.40	6.00	7.40	22	18	22
Maryland	93	89	93	8.00	6.20	7.50	744	552	698
Virginia	335	322	338	7.50	5.60	7.60	2,512	1,803	2,569
West Virginia	485	480	504	6.40	4.80	6.90	3,104	2,304	3,478
North Carolina	89	84	81	6.60	4.90	5.60	587	412	454
South Carolina	23	23	23	3.70	3.00	4.20	85	69	97
Georgia	69	70	66	4.20	2.70	3.00	290	189	198
Florida	63	64	63	3.50	3.10	3.50	220	198	220
Ohio	1,977	1,957	2,094	5.70	4.60	7.10	11,269	9,002	14,86
Indiana	606	606	648	6.70	5.20	8.00	4,060	3,151	5,184
Illinois	561	516	516	6.90	5.30	7.90	3,871	2,735	4,076
Michigan	1,161	1,115	1,171	6.80	5.20	8.00	7,895	5,798	9,368
Wisconsin	432	367	341	6.40	4.60	7.50	2,765	1,688	2,558
Minnesota	468	445	400	6.10	4.70	7.20	2,855	2,092	2,880
Iowa	1,005	775	829	6.90	5.40	8.40	6,934	4,185	6,964
Missouri	1,158	1,042	1,105	6.00	4.50	7.10	6,948	4,689	7,846
North Dakota	272	250	240	5.70	4.60	7.30	1,550	1,150	1,752
South Dakota	675	689	703	5.60	4.50	7.70	3,780	3,100	5,413
Nebraska	521	596	733	6.00	5.20	8.10	3,126	3,099	5,937
Kansas	321	285	314	5.90	4.80	7.30	1,894	1,368	2,292
Kentucky	651	631	675	6.40	5.00	7.00	4,166	3,155	4,725
Tennessee	349	340	340	5,80	4,00	5,50	2,024	1,360	1,870
Alabama	79	83	90	4,40	2,70	3,40	348	224	306
Mississippi	148	142	142	3.40	3.00	2.60	503	426	369
Louisiana	124	124	122	3.80	2.80	2.90	471	347	354
Texas	3,047	3,077	2,862	6.10	3.40	5.20	18,587	10,462	14,882
Oklahoma	91	91	87	6.20	4.30	5.80	564	391	505
Arkansas	96	90	81	4.20	2.90	3.10	403	261	251
Montana	1,973	2,270	2,315	5.80	4.70	8.70	11,443	10,669	20,140
Wyoming	2,350	2,420	2,396	6.30	5.50	9.00	14,805	13,310	21,564
Colorado	2,306	2,054	2,444	5.30	4.60	7.60	12,222	9,448	18,574
New Mexico	2,468	2,343	2,062	5.90	3.90	6.40	14,561	9,138	13,197
Arizona	1,200	1,100	1,155	7.00	4.90	6.30	8,400	5,390	7,276
Utah	2,200	2,250	2,340	6.50	4.90	8.90	14,300	11,025	20,826
Nevada	1,100	1,190	1,119	7.60	5.30	8.90	8,360	6,307	9,959
Idaho	2,623	2,492	2,642	6.30	6.00	8.30	16,525	14,952	21,929
Washington	555	500	520	6.90	5.40	8.00	3,830	2,700	4,160
Oregon	2,025	1,860	1,953	6.70	4.50	6.40	13,568	8,370	12,499
California	2,500	2,310	2,402	6.80	5.30	8.10	17,000	12,243	19,456
United States	37,452	36,327	37,209	6.30	4.80	7.50	235,855	174,545	278,939

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[1] Preliminary estimate.

WOOL.

TABLE 56.—*Wool: Estimated production, 1920–1922.*

State	Production (000 omitted)			Weight per fleece			Number of fleeces (000 omitted)		
	1920	1921	1922	1920	1921	1922	1920	1921	1922
Maine	760	600	589	6.4	6.0	6.2	119	100	95
New Hampshire	182	161	128	6.5	6.7	6.4	28	24	20
Vermont	430	365	312	7.2	6.3	6.5	60	58	48
Massachusetts	95	102	102	6.5	6.0	6.0	15	17	17
Rhode Island	14	18	19	6.1	5.9	6.3	2	3	3
Connecticut	63	60	54	5.6	6.0	6.0	11	10	9
New York	3,291	2,941	2,882	6.9	6.7	6.8	477	439	424
New Jersey	60	55	55	7.0	6.0	5.8	9	9	9
Pennsylvania	3,582	3,403	3,437	6.5	6.4	6.7	551	532	513
Delaware	17	13	12	5.8	3.5	5.8	3	4	2
Maryland	562	440	449	6.0	6.0	6.4	94	73	70
Virginia	1,596	1,541	1,607	4.6	4.6	4.9	347	335	328
West Virginia	2,500	2,300	2,346	5.0	4.9	4.9	500	469	479
North Carolina	420	395	395	4.2	4.2	4.5	100	94	88
South Carolina	101	97	102	4.5	3.5	4.0	22	28	26
Georgia	165	160	157	3.2	2.8	2.9	52	57	54
Florida	157	150	157	3.2	3.1	3.2	49	48	49
Ohio	14,500	13,200	13,596	7.4	7.2	7.4	1,959	1,833	1,837
Indiana	3,654	3,458	3,527	7.0	7.0	7.0	522	494	504
Illinois	3,974	3,496	3,426	7.8	7.6	7.5	509	460	457
Michigan	8,385	7,714	7,868	7.6	7.2	7.3	1,103	1,071	1,078
Wisconsin	3,219	2,701	2,446	7.4	7.0	7.3	435	386	335
Minnesota	2,660	2,340	2,457	7.1	7.2	7.2	375	325	341
Iowa	5,966	5,369	5,208	7.7	7.5	7.9	775	716	659
Missouri	7,552	5,202	5,098	6.8	6.5	6.6	1,111	800	772
North Dakota	1,899	1,633	1,715	7.5	7.7	7.9	253	212	217
South Dakota	4,804	4,324	4,021	7.0	7.2	7.5	686	601	536
Nebraska	1,886	1,641	1,395	8.0	7.4	8.0	236	222	174
Kansas	2,087	1,878	1,690	7.5	7.0	7.5	278	268	225
Kentucky	3,000	2,600	2,678	5.0	4.7	5.0	600	553	536
Tennessee	1,462	1,320	1,294	4.8	4.5	4.5	305	293	288
Alabama	292	189	185	4.0	3.0	3.5	73	63	53
Mississippi	475	470	446	3.6	3.5	3.0	132	134	149
Louisiana	600	508	525	3.9	3.7	3.7	154	137	142
Texas	18,200	18,000	19,300	7.0	7.7	7.2	2,600	2,338	2,681
Oklahoma	477	482	458	7.2	7.3	7.3	66	66	63
Arkansas	394	355	344	4.5	4.3	4.5	88	83	76
Montana	16,000	16,400	15,416	7.9	8.3	8.0	2,025	1,976	1,927
Wyoming	21,000	23,684	22,500	8.3	8.2	8.0	2,530	2,288	2,812
Colorado	6,888	6,839	6,976	6.7	7.0	6.5	1,028	977	1,073
New Mexico	10,600	10,100	9,600	6.3	6.4	6.0	1,683	1,578	1,600
Arizona	4,800	5,616	6,000	6.5	6.0	6.5	738	936	923
Utah	16,150	16,500	15,984	7.8	8.0	7.4	2,071	2,062	2,160
Nevada	7,500	7,000	6,580	7.3	7.3	6.5	1,027	959	1,012
Idaho	18,650	16,800	15,000	8.1	8.0	7.8	2,302	2,100	1,923
Washington	5,201	4,421	4,112	8.7	8.8	7.7	598	502	534
Oregon	14,435	14,435	12,992	8.4	8.6	7.5	1,718	1,678	1,732
California	14,300	14,070	13,455	7.6	7.5	6.9	1,882	1,876	1,950
United States	235,005	225,546	219,095	7.3	7.4	7.1	32,301	30,287	31,003

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[1] Preliminary estimate.

SWINE.

TABLE 57.—*Swine: Number and value on farms January 1, 1921–1923, by States.*

States	Number (thousands) Jan. 1			Average price per head Jan. 1			Farm value (thousands of dollars) Jan. 1		
	1921	1922	1923	1921	1922	1923	1921	1922	1923
Maine	73	69	68	$21.00	$14.70	$18.30	1,533	1,014	1,244
New Hampshire	33	30	28	20.00	15.00	17.00	660	450	476
Vermont	63	53	59	14.80	12.40	14.00	932	657	826
Massachusetts	83	76	72	20.50	16.30	17.00	1,702	1,239	1,224
Rhode Island	12	12	12	21.00	17.50	18.10	252	210	217
Connecticut	55	47	45	20.00	17.00	17.70	1,100	799	796
New York	559	520	546	17.50	14.50	15.50	9,782	7,540	8,463
New Jersey	126	132	132	20.00	17.00	17.50	2,530	2,244	2,310
Pennsylvania	1,143	1,143	1,200	17.50	14.50	16.00	20,002	16,574	19,200
Delaware	37	41	43	16.00	10.00	11.00	592	410	473
Maryland	291	285	299	13.00	11.50	13.00	3,783	3,278	3,887
Virginia	847	754	792	11.50	9.60	10.50	9,740	7,238	8,316
West Virginia	293	293	316	14.00	10.80	12.30	4,102	3,164	3,887
North Carolina	1,246	1,258	1,271	15.70	12.00	13.30	19,562	15,096	16,904
South Carolina	853	938	947	13.50	9.20	11.00	11,516	8,630	10,417
Georgia	2,030	2,131	2,152	11.50	8.60	7.80	23,345	18,327	16,786
Florida	740	725	703	10.00	7.00	7.50	7,400	5,075	5,272
Ohio	2,806	2,862	3,091	13.30	10.90	12.10	37,320	31,196	37,401
Indiana	3,532	3,567	4,102	13.00	11.00	11.90	45,916	39,237	48,814
Illinois	4,129	4,046	4,693	13.70	10.50	12.50	56,567	42,483	58,662
Michigan	1,084	1,051	1,135	14.30	11.30	12.50	15,501	11,876	14,188
Wisconsin	1,676	1,659	1,725	14.50	10.50	13.10	24,302	17,420	22,598
Minnesota	2,262	2,330	2,610	15.30	11.20	13.20	34,609	26,096	34,452
Iowa	7,471	8,218	9,615	14.50	11.00	12.80	108,330	90,398	123,072
Missouri	3,656	3,915	4,306	11.00	8.50	9.80	40,216	33,278	42,199
North Dakota	431	435	478	14.00	11.00	13.50	6,034	4,785	6,453
South Dakota	1,759	1,935	2,283	13.50	10.00	13.50	23,746	19,350	30,820
Nebraska	3,505	3,680	4,232	13.50	10.00	12.00	47,318	36,800	50,784
Kansas	1,837	2,275	2,776	12.00	9.50	11.00	22,044	21,612	30,536
Kentucky	1,278	1,214	1,311	9.90	7.50	8.80	12,652	9,105	11,537
Tennessee	1,594	1,546	1,654	9.50	8.00	9.30	15,143	12,368	15,382
Alabama	1,347	1,307	1,281	10.00	8.60	9.30	13,470	11,240	11,913
Mississippi	1,195	1,183	1,207	9.50	8.00	8.00	11,352	9,464	9,656
Louisiana	749	756	756	11.70	8.60	7.80	8,763	6,502	5,897
Texas	2,426	2,475	2,326	11.80	8.50	8.80	28,627	21,038	20,469
Oklahoma	1,213	1,334	1,401	10.30	8.50	8.80	12,494	11,339	12,329
Arkansas	1,268	1,125	1,114	8.80	7.10	6.90	11,158	7,988	7,687
Montana	160	180	198	16.50	13.10	13.20	2,640	2,358	2,614
Wyoming	68	73	84	14.00	12.00	12.50	952	876	1,050
Colorado	414	455	523	12.30	9.60	10.50	5,092	4,368	5,492
New Mexico	90	94	89	15.00	9.00	10.00	1,350	864	890
Arizona	48	50	57	16.00	12.00	13.00	768	600	741
Utah	90	90	108	13.00	10.00	10.90	1,170	900	1,177
Nevada	25	25	25	11.00	10.00	14.00	275	250	350
Idaho	206	196	235	12.50	11.00	11.50	2,575	2,156	2,702
Washington	236	197	217	15.00	12.50	14.80	3,540	2,462	3,212
Oregon	240	220	231	12.80	10.70	11.20	3,072	2,354	2,587
California	818	834	876	14.50	11.70	11.80	11,861	9,758	10,337
United States	56,097	57,834	63,424	12.97	10.07	11.46	727,380	582,448	726,699

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[1] Preliminary estimate.

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